

Cloud Connect

API Reference

Issue 01
Date 2022-11-30



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1 Before You Start

1.1 Overview

Welcome to *Cloud Connect API Reference*. Cloud Connect allows you to quickly build high-quality networks that are both fast and stable. With Cloud Connect, you can link VPCs across regions and between VPCs and data centers off the cloud. With Cloud Connect, you can build a globally connected cloud network with enterprise-class scalability and communications capabilities.

This document describes how to use application programming interfaces (APIs) to perform operations on Cloud Connect resources, such as creating, querying, modifying, or deleting cloud connections. For details about all supported operations, see [API Overview](#).

If you plan to access Cloud Connect by calling an API, ensure that you are familiar with the product concepts. For details, see [Service Overview](#).

1.2 API Calling

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

1.3 Endpoints

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

1.4 Constraints

- The number of Cloud Connect resources that you can create is determined by your quota. To view or increase the quota, see [Constraints and Limitations](#).
- For detailed constraints, see the constraints described in specific APIs.

1.5 Concepts

- **Account**

An account is created upon successful signing up. The account has full access permissions for all of its cloud services and resources. It can be used to reset user passwords and grant user permissions. The account is a payment entity, which should not be used directly to perform routine management. For security purposes, create Identity and Access Management (IAM) users and grant them permissions for routine management.
- **User**

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

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

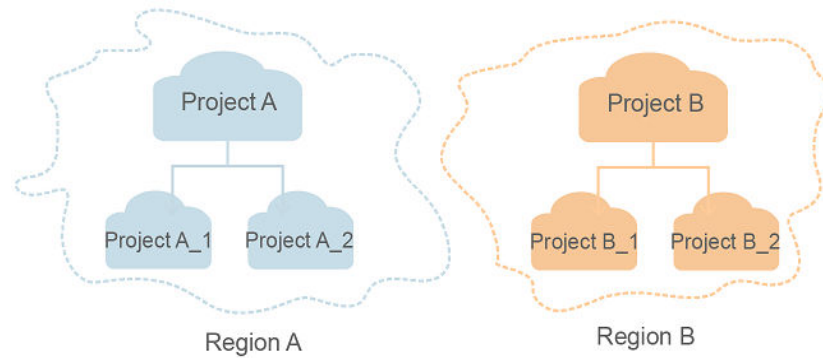
Regions are divided based on geographical location and network latency. Public services, such as Elastic Cloud Server (ECS), Elastic Volume Service (EVS), Object Storage Service (OBS), Virtual Private Cloud (VPC), Elastic IP (EIP), and Image Management Service (IMS), are shared within the same region. Regions are classified into universal regions and dedicated regions. A universal region provides universal cloud services for common tenants. A dedicated region provides specific services for specific tenants.

For details, see [Region and AZ](#).
- **AZ**

An AZ comprises of one or more physical data centers equipped with independent ventilation, fire, water, and electricity facilities. Computing, network, storage, and other resources in an AZ are logically divided into multiple clusters. AZs within a region are interconnected using high-speed optical fibers to allow you to build cross-AZ high-availability systems.
- **Project**

A project corresponds to a region. Default projects are defined to group and physically isolate resources (including computing, storage, and network resources) across regions. Users can be granted permissions in a default project to access all resources under their accounts in the region associated with the project. If you need more refined access control, create subprojects under a default project and create resources in subprojects. Then you can assign users the permissions required to access only the resources in the specific subprojects.

Figure 1-1 Project isolation model



- **Enterprise project**
Enterprise projects group and manage resources across regions. Resources in different enterprise projects are logically isolated. An enterprise project can contain resources of multiple regions, and resources can be added to or removed from enterprise projects.
For details about enterprise projects and about how to obtain enterprise project IDs, see [Enterprise Management User Guide](#).

2 API Overview

Cloud Connect provides Huawei-developed REST APIs.

These APIs allow you to perform operations on three types of Cloud Connect resources: cloud connections, network instances, and cloud connection routes.

Table 2-1 describes the APIs provided by Cloud Connect.

Table 2-1 Cloud Connect APIs

Type	Description
Cloud connection APIs	APIs for creating, querying, updating, deleting a cloud connection, and listing all the cloud connections
Network instance APIs	APIs for loading, querying, updating, removing a network instance, and listing all the network instances
Cloud connection route APIs	APIs for querying a route and listing all the routes

3 Calling APIs

3.1 Making an API Request

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

Request URI

A request URI is in the following format:

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

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

Table 3-1 URI parameter description

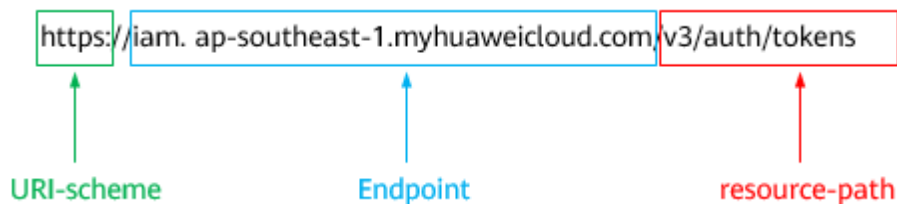
Parameter	Description
URI-scheme	Protocol used to transmit requests. All APIs use HTTPS.
Endpoint	Domain name or IP address of the server bearing the REST service. The endpoint varies between services in different regions. It can be obtained from Regions and Endpoints . For example, the endpoint of IAM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

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

For example, to obtain an IAM token in the **CN-Hong Kong** region, obtain the endpoint of IAM (iam.ap-southeast-1.myhuaweicloud.com) for this region and the resource-path (/v3/auth/tokens) in the URI of the API used to **obtain a user token**. Then, construct the URI as follows:

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

Figure 3-1 Example URI



NOTE

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

Request Methods

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

Table 3-2 HTTP methods

Method	Description
GET	Requests the server to return specified resources.
PUT	Requests the server to update specified resources.
POST	Requests the server to add resources or perform special operations.
DELETE	Requests the server to delete specified resources, for example, an object.
HEAD	Same as GET except that the server must return only the response header.

Method	Description
PATCH	Requests the server to update partial content of a specified resource. If the resource does not exist, a new resource will be created.

For example, in the case of the API used to [obtain a user token](#), the request method is **POST**. The request is as follows:

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

Request Header

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

Common request header fields are as follows.

Table 3-3 Common request header fields

Parameter	Description	Mandatory	Example Value
Host	Specifies the server domain name and port number of the resources being requested. The value can be obtained from the URL of the service API. The value is in the format of <i>Hostname:Port number</i> . If the port number is not specified, the default port is used. The default port number for https is 443 .	No This field is mandatory for AK/SK authentication.	code.test.com or code.test.com:443
Content-Type	Specifies the type (or format) of the message body. The default value application/json is recommended. Other values of this field will be provided for specific APIs if any.	Yes	application/json
Content-Length	Specifies the length of the request body. The unit is byte.	No	3495

Parameter	Description	Mandatory	Example Value
X-Project-Id	Specifies the project ID. Obtain the project ID by following the instructions in Obtaining a Project ID .	No This field is mandatory for requests that use AK/SK authentication in the Dedicated Cloud (DeC) scenario or multi-project scenario.	e9993fc787d94b6c886cbaa340f9c0f4
X-Auth-Token	Specifies the user token. It is a response to the API for obtaining a user token (This is the only API that does not require authentication). After the request is processed, the value of X-Subject-Token in the response header is the token value.	No This field is mandatory for token authentication.	The following is part of an example token: MIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ

 **NOTE**

In addition to supporting authentication using tokens, APIs support authentication using AK/SK, which uses SDKs to sign a request. During the signature, the **Authorization** (signature authentication) and **X-Sdk-Date** (time when a request is sent) headers are automatically added in the request.

For more details, see "Authentication Using AK/SK" in [Authentication](#).

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

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

(Optional) Request Body

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

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

In the case of the API used to [obtain a user token](#), the request parameters and parameter description can be obtained from the API request. The following provides an example request with a body included. Replace *username*,

domainname, *\$ADMIN_PASS* (login password), and *xxxxxxxxxxxxxxxxxxxxxx* (project name) with the actual values. Obtain a project name from [Regions and Endpoints](#).

NOTE

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

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

```
{
  "auth": {
    "identity": {
      "methods": [
        "password"
      ],
      "password": {
        "user": {
          "name": "username",
          "password": "$ADMIN_PASS", //You are advised to store it in ciphertext in the
configuration file or an environment variable and decrypt it when needed to ensure security.
        "domain": {
          "name": "domainname"
        }
      }
    }
  },
  "scope": {
    "project": {
      "name": "xxxxxxxxxxxxxxxxxxxxxx"
    }
  }
}
```

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

3.2 Authentication

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

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

Token Authentication

NOTE

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

A token specifies temporary permissions in a computer system. During API authentication using a token, the token is added to requests to get permissions for calling the API. You can obtain a token by calling the [Obtaining User Token](#) API.

IMS is a project-level service. When you call the API, set **auth.scope** in the request body to **project**.

```
{
  "auth": {
    "identity": {
      "methods": [
        "password"
      ],
      "password": {
        "user": {
          "name": "username", // IAM user name
          "password": $ADMIN_PASS, //IAM user password. You are advised to store it in ciphertext in
the configuration file or an environment variable and decrypt it when needed to ensure security.
          "domain": {
            "name": "domainname" // Name of the account to which the IAM user belongs
          }
        }
      }
    },
    "scope": {
      "project": {
        "name": "xxxxxxx" // Project name
      }
    }
  }
}
```

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

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

AK/SK Authentication

NOTE

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

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

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

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

NOTE

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

3.3 Response

Status Code

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

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

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

Response Header

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

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

NOTE

For security purposes, you are advised to set the token in ciphertext in configuration files or environment variables and decrypt it when using it.

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

```

connection → keep-alive
content-type → application/json
date → Tue, 12 Feb 2019 06:52:13 GMT
server → Web Server
strict-transport-security → max-age=31536000; includeSubdomains;
transfer-encoding → chunked
via → proxy A
x-content-type-options → nosniff
x-download-options → noopen
x-frame-options → SAMEORIGIN
x-iam-trace-id → 218d45ab-d674-4995-af3a-2d0255ba41b5
x-subject-token → [REDACTED]
x-xss-protection → 1; mode=block;
    
```

(Optional) Response Body

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

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

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

```

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

```
{
  "error_msg": "The request message format is invalid.",
  "error_code": "IMG.0001"
}
```

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

4 API

4.1 Cloud Connections

4.1.1 Creating a Cloud Connection

Function

This API is used to create a cloud connection.

Calling Method

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

URI

POST /v3/{domain_id}/ccaas/cloud-connections

Table 4-1 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Request Parameters

Table 4-2 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-3 Request body parameters

Parameter	Mandatory	Type	Description
cloud_connection	Yes	CreateCloudConnection object	Details of the cloud connection.

Table 4-4 CreateCloudConnection

Parameter	Mandatory	Type	Description
name	Yes	String	Resource name.
description	No	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
enterprise_project_id	No	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36

Response Parameters

Status code: 201

Table 4-5 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36

Parameter	Type	Description
cloud_connection	CloudConnection object	Cloud connection.

Table 4-6 CloudConnection

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
enterprise_project_id	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
tags	Array of Tag objects	Resource tags. Array Length: 1 - 20
status	String	Cloud connection status. ACTIVE : The cloud connection is available. Minimum: 0 Maximum: 36
admin_state_up	Boolean	Administrative status of the cloud connection.
used_scene	String	Cloud Connect application scenarios. VPC : Cloud Connect is used to connect VPCs. Default: vpc Minimum: 0 Maximum: 36

Parameter	Type	Description
network_instance_number	Integer	Number of the network instances loaded to the cloud connection. Minimum: 0 Maximum: 10000
bandwidth_package_number	Integer	Number of the bandwidth packages bound to the cloud connection. Minimum: 0 Maximum: 10000
inter_region_bandwidth_number	Integer	Number of the inter-region bandwidths configured for the cloud connection. Minimum: 0 Maximum: 10000

Table 4-7 Tag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Example Requests

Creating a cloud connection

```
POST https://{cc_endpoint}/v3/{domain_id}/ccaas/cloud-connections
{
  "cloud_connection": {
    "name": "test",
    "description": "",
    "enterprise_project_id": "0"
  }
}
```

Example Responses

Status code: 201

The cloud connection has been created.

```
{
  "cloud_connection": {
    "status": "ACTIVE",
```

```
"id" : "XXX",
"name" : "cloud-connection name",
"description" : "cloud-connection description",
"domain_id" : "XXX",
"created_at" : "2023-09-20T08:28:28Z",
"updated_at" : "2023-09-20T08:28:28Z",
"admin_state_up" : true,
"used_scene" : "vpc",
"enterprise_project_id" : "0",
"network_instance_number" : 0,
"bandwidth_package_number" : 0,
"inter_region_bandwidth_number" : 0,
"tags" : [ ]
},
"request_id" : "d793a71f70e9370278b046ae39338393"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Creating a cloud connection

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class CreateCloudConnectionSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

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

        CreateCloudConnectionRequest request = new CreateCloudConnectionRequest();
        CreateCloudConnectionRequestBody body = new CreateCloudConnectionRequestBody();
        CreateCloudConnection cloudConnectionbody = new CreateCloudConnection();
        cloudConnectionbody.setName("test")
            .withDescription("")
            .withEnterpriseProjectId("0");
        body.withCloudConnection(cloudConnectionbody);
        request.withBody(body);
        try {
            CreateCloudConnectionResponse response = client.createCloudConnection(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

Creating a cloud connection

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = CreateCloudConnectionRequest()
        cloudConnectionbody = CreateCloudConnection(
            name="test",
            description="",
            enterprise_project_id="0"
        )
        request.body = CreateCloudConnectionRequestBody(
            cloud_connection=cloudConnectionbody
        )
        response = client.create_cloud_connection(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

Creating a cloud connection

```
package main

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



```

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateCloudConnectionRequest{}
    descriptionCloudConnection:= ""
    enterpriseProjectIdCloudConnection:= "0"
    cloudConnectionbody := &model.CreateCloudConnection{
        Name: "test",
        Description: &descriptionCloudConnection,
        EnterpriseProjectId: &enterpriseProjectIdCloudConnection,
    }
    request.Body = &model.CreateCloudConnectionRequestBody{
        CloudConnection: cloudConnectionbody,
    }
    response, err := client.CreateCloudConnection(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
201	The cloud connection has been created.

Error Codes

See [Error Codes](#).

4.1.2 Querying the Cloud Connection List

Function

This API is used to query the cloud connection list.

Parameters **marker** and **limit** are used for pagination query. The two parameters take effect only when they are used together.

Calling Method

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

URI

GET /v3/{domain_id}/ccaas/cloud-connections

Table 4-8 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Table 4-9 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 1000 Minimum: 1 Maximum: 1000 Default: 1000

Parameter	Mandatory	Type	Description
marker	No	String	Pagination query information. You can obtain the marker values from the response of the last API call. You can enter the marker value of the previous page or the next page. If you enter the marker value of the previous page, the previous page will be queried. If you enter the marker value of the next page, the next page will be queried. During pagination query, the query criteria, including the filters, sorting criteria, and the limit value, cannot be modified. Minimum: 1 Maximum: 4096
id	No	Array	Resource ID. Multiple IDs can be queried. Array Length: 1 - 20
name	No	Array	Resource name. Multiple names can be queried. Array Length: 1 - 20
description	No	Array	Description. Multiple descriptions can be queried. Array Length: 1 - 20
enterprise_project_id	No	Array	Enterprise project IDs. Array Length: 1 - 20
status	No	Array	Cloud connection status. ACTIVE : Cloud connections are available. Array Length: 1 - 10
type	No	Array	Type (application scenario) used to query cloud connections. Array Length: 1 - 10
used_scene	No	Array	Searching for cloud connections by application scenario Array Length: 1 - 2

Request Parameters

Table 4-10 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 200

Table 4-11 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
page_info	PageInfo object	Pagination query information.
cloud_connections	Array of CloudConnection objects	Cloud connection list. Array Length: 0 - 2000

Table 4-12 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier. Minimum: 1 Maximum: 4096
previous_marker	String	Forward pagination identifier. Minimum: 1 Maximum: 4096
current_count	Integer	Number of the resources in the current list. Minimum: 0 Maximum: 2000

Table 4-13 CloudConnection

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
enterprise_project_id	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
tags	Array of Tag objects	Resource tags. Array Length: 1 - 20
status	String	Cloud connection status. ACTIVE : The cloud connection is available. Minimum: 0 Maximum: 36
admin_state_up	Boolean	Administrative status of the cloud connection.
used_scene	String	Cloud Connect application scenarios. VPC : Cloud Connect is used to connect VPCs. Default: vpc Minimum: 0 Maximum: 36
network_instance_number	Integer	Number of the network instances loaded to the cloud connection. Minimum: 0 Maximum: 10000

Parameter	Type	Description
bandwidth_package_number	Integer	Number of the bandwidth packages bound to the cloud connection. Minimum: 0 Maximum: 10000
inter_region_bandwidth_number	Integer	Number of the inter-region bandwidths configured for the cloud connection. Minimum: 0 Maximum: 10000

Table 4-14 Tag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Example Requests

Querying the cloud connection list

```
GET https://{cc_endpoint}/v3/{domain_id}/ccaas/cloud-connections
```

Example Responses

Status code: 200

The cloud connection list has been queried.

```
{
  "request_id": "ab44eb7776995d84a7580fe6a7bd7629",
  "cloud_connections": [ {
    "status": "ACTIVE",
    "id": "XXX",
    "name": "cloud-connection name",
    "description": "cloud-connection description",
    "domain_id": "XXX",
    "created_at": "2023-09-20T08:28:28Z",
    "updated_at": "2023-09-20T08:28:28Z",
    "admin_state_up": true,
    "used_scene": "vpc",
    "enterprise_project_id": "0",
    "network_instance_number": 0,
    "bandwidth_package_number": 0,
    "inter_region_bandwidth_number": 0,
    "tags": [ ]
  } ],
}
```

```
"page_info" : {  
  "previous_marker" : "XXX",  
  "current_count" : 30  
}  
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.GlobalCredentials;  
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.cc.v3.region.CcRegion;  
import com.huaweicloud.sdk.cc.v3.*;  
import com.huaweicloud.sdk.cc.v3.model.*;  
  
import java.util.List;  
import java.util.ArrayList;  
  
public class ListCloudConnectionsSolution {  
    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");  
  
        ICredential auth = new GlobalCredentials()  
            .withAk(ak)  
            .withSk(sk);  
  
        CcClient client = CcClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ListCloudConnectionsRequest request = new ListCloudConnectionsRequest();  
        request.withStatus();  
        request.withType();  
        request.withUsedScene();  
        request.withLimit(<limit>);  
        request.withMarker("<marker>");  
        request.withId();  
        request.withName();  
        request.withDescription();  
        request.withEnterpriseProjectId();  
        try {  
            ListCloudConnectionsResponse response = client.listCloudConnections(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  
  
from huaweicloudsdkcore.auth.credentials import GlobalCredentials  
from huaweicloudsdkcc.v3.region.cc_region import CcRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")  
    sk = __import__('os').getenv("CLOUD_SDK_SK")  
  
    credentials = GlobalCredentials(ak, sk) \  
  
    client = CcClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(CcRegion.value_of("<YOUR REGION>")) \  
        .build()  
  
    try:  
        request = ListCloudConnectionsRequest()  
        request.status =  
        request.type =  
        request.used_scene =  
        request.limit = <limit>  
        request.marker = "<marker>"  
        request.id =  
        request.name =  
        request.description =  
        request.enterprise_project_id =  
        response = client.list_cloud_connections(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/global"  
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")
```



```
auth := global.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    Build()

client := cc.NewCcClient(
    cc.CcClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ListCloudConnectionsRequest{
    limitRequest:= int32(<limit>)
    request.Limit = &limitRequest
    markerRequest:= "<marker>"
    request.Marker = &markerRequest
}
response, err := client.ListCloudConnections(request)
if err == nil {
    fmt.Printf("%v\n", response)
} else {
    fmt.Println(err)
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The cloud connection list has been queried.

Error Codes

See [Error Codes](#).

4.1.3 Querying a Cloud Connection

Function

This API is used to query the details of a cloud connection.

Calling Method

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

URI

GET /v3/{domain_id}/ccaas/cloud-connections/{id}

Table 4-15 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36

Request Parameters

Table 4-16 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 200

Table 4-17 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
cloud_connect ion	CloudConnec tion object	Cloud connection.

Table 4-18 CloudConnection

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.

Parameter	Type	Description
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
enterprise_project_id	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
tags	Array of Tag objects	Resource tags. Array Length: 1 - 20
status	String	Cloud connection status. ACTIVE : The cloud connection is available. Minimum: 0 Maximum: 36
admin_state_up	Boolean	Administrative status of the cloud connection.
used_scene	String	Cloud Connect application scenarios. VPC : Cloud Connect is used to connect VPCs. Default: vpc Minimum: 0 Maximum: 36
network_instance_number	Integer	Number of the network instances loaded to the cloud connection. Minimum: 0 Maximum: 10000
bandwidth_package_number	Integer	Number of the bandwidth packages bound to the cloud connection. Minimum: 0 Maximum: 10000

Parameter	Type	Description
inter_region_bandwidth_number	Integer	Number of the inter-region bandwidths configured for the cloud connection. Minimum: 0 Maximum: 10000

Table 4-19 Tag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Example Requests

Querying the details of a cloud connection

```
GET https://{cc_endpoint}/v3/{domain_id}/ccaas/cloud-connections/{id}
```

Example Responses

Status code: 200

The details of the cloud connection have been queried.

```
{
  "cloud_connection": {
    "status": "ACTIVE",
    "id": "XXX",
    "name": "cloud-connection-name",
    "description": "cloud-connection-description",
    "domain_id": "XXX",
    "created_at": "2023-09-20T08:28:28Z",
    "updated_at": "2023-09-20T08:28:28Z",
    "admin_state_up": true,
    "used_scene": "vpc",
    "enterprise_project_id": "0",
    "network_instance_number": 0,
    "bandwidth_package_number": 0,
    "inter_region_bandwidth_number": 0,
    "tags": [ ]
  },
  "request_id": "c4a34234aa46915cb04531216c1cc379"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class ShowCloudConnectionSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowCloudConnectionRequest request = new ShowCloudConnectionRequest();
        try {
            ShowCloudConnectionResponse response = client.showCloudConnection(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")
```

```
credentials = GlobalCredentials(ak, sk) \

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

try:
    request = ShowCloudConnectionRequest()
    response = client.show_cloud_connection(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The details of the cloud connection have been queried.

Error Codes

See [Error Codes](#).

4.1.4 Updating a Cloud Connection

Function

This API is used to update a cloud connection.

Calling Method

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

URI

PUT /v3/{domain_id}/ccaas/cloud-connections/{id}

Table 4-20 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36

Request Parameters

Table 4-21 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-22 Request body parameters

Parameter	Mandatory	Type	Description
cloud_connection	Yes	UpdateCloudConnection object	Details of the cloud connection to be updated.

Table 4-23 UpdateCloudConnection

Parameter	Mandatory	Type	Description
name	No	String	Resource name.
description	No	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255

Response Parameters

Status code: 200

Table 4-24 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
cloud_connection	CloudConnection object	Cloud connection.

Table 4-25 CloudConnection

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.

Parameter	Type	Description
enterprise_project_id	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
tags	Array of Tag objects	Resource tags. Array Length: 1 - 20
status	String	Cloud connection status. ACTIVE : The cloud connection is available. Minimum: 0 Maximum: 36
admin_state_up	Boolean	Administrative status of the cloud connection.
used_scene	String	Cloud Connect application scenarios. VPC : Cloud Connect is used to connect VPCs. Default: vpc Minimum: 0 Maximum: 36
network_instance_number	Integer	Number of the network instances loaded to the cloud connection. Minimum: 0 Maximum: 10000
bandwidth_package_number	Integer	Number of the bandwidth packages bound to the cloud connection. Minimum: 0 Maximum: 10000
inter_region_bandwidth_number	Integer	Number of the inter-region bandwidths configured for the cloud connection. Minimum: 0 Maximum: 10000

Table 4-26 Tag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Example Requests

Updating the name and description of a cloud connection

```
PUT https://{cc_endpoint}/v3/{domain_id}/ccaas/cloud-connections/{id}
{
  "cloud_connection": {
    "name": "new cloud-connection name",
    "description": "new cloud-connection description"
  }
}
```

Example Responses

Status code: 200

The cloud connection has been updated.

```
{
  "cloud_connection": {
    "status": "ACTIVE",
    "id": "XXX",
    "name": "new cloud-connection name",
    "description": "new cloud-connection description",
    "domain_id": "XXX",
    "created_at": "2023-09-20T08:28:28Z",
    "updated_at": "2023-09-20T09:24:38Z",
    "admin_state_up": true,
    "used_scene": "vpc",
    "enterprise_project_id": "0",
    "network_instance_number": 0,
    "bandwidth_package_number": 0,
    "inter_region_bandwidth_number": 0,
    "tags": []
  },
  "request_id": "0e44ca4e6c250521d154e96a7e2b3cf0"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Updating the name and description of a cloud connection

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class UpdateCloudConnectionSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdateCloudConnectionRequest request = new UpdateCloudConnectionRequest();
        UpdateCloudConnectionRequestBody body = new UpdateCloudConnectionRequestBody();
        UpdateCloudConnection cloudConnectionbody = new UpdateCloudConnection();
        cloudConnectionbody.setName("new cloud-connection name")
            .withDescription("new cloud-connection description");
        body.withCloudConnection(cloudConnectionbody);
        request.withBody(body);
        try {
            UpdateCloudConnectionResponse response = client.updateCloudConnection(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

Updating the name and description of a cloud connection

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
sk = __import__('os').getenv("CLOUD_SDK_SK")

credentials = GlobalCredentials(ak, sk) \

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

try:
    request = UpdateCloudConnectionRequest()
    cloudConnectionbody = UpdateCloudConnection(
        name="new cloud-connection name",
        description="new cloud-connection description"
    )
    request.body = UpdateCloudConnectionRequestBody(
        cloud_connection=cloudConnectionbody
    )
    response = client.update_cloud_connection(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

Updating the name and description of a cloud connection

```
package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateCloudConnectionRequest{}
    nameCloudConnection:= "new cloud-connection name"
    descriptionCloudConnection:= "new cloud-connection description"
    cloudConnectionbody := &model.UpdateCloudConnection{
        Name: &nameCloudConnection,
```

```

        Description: &descriptionCloudConnection,
    }
    request.Body = &model.UpdateCloudConnectionRequestBody{
        CloudConnection: cloudConnectionbody,
    }
    response, err := client.UpdateCloudConnection(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The cloud connection has been updated.

Error Codes

See [Error Codes](#).

4.1.5 Deleting a Cloud Connection

Function

This API is used to delete a cloud connection.

Calling Method

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

URI

DELETE /v3/{domain_id}/ccaas/cloud-connections/{id}

Table 4-27 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Parameter	Mandatory	Type	Description
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36

Request Parameters

Table 4-28 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

None

Example Requests

Deleting a cloud connection

```
DELETE https://{cc_endpoint}/v3/{domain_id}/ccaas/cloud-connections/{id}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class DeleteCloudConnectionSolution {

    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");

ICredential auth = new GlobalCredentials()
    .withAk(ak)
    .withSk(sk);

CcClient client = CcClient.newBuilder()
    .withCredential(auth)
    .withRegion(CcRegion.valueOf("<YOUR REGION>"))
    .build();
DeleteCloudConnectionRequest request = new DeleteCloudConnectionRequest();
try {
    DeleteCloudConnectionResponse response = client.deleteCloudConnection(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = DeleteCloudConnectionRequest()
        response = client.delete_cloud_connection(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	The cloud connection has been deleted.

Error Codes

See [Error Codes](#).

4.1.6 Adding a Tag to a Cloud Connection

Function

This API is used to add a tag to a cloud connection.

Calling Method

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

URI

POST /v3/{domain_id}/ccaas/cloud-connections/{id}/tag

Table 4-29 Path Parameters

Parameter	Mandatory	Type	Description
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Request Parameters

Table 4-30 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-31 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of Tag objects	Tags. Array Length: 1 - 20

Table 4-32 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	No	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Response Parameters

Status code: 204

Table 4-33 Response header parameters

Parameter	Type	Description
x-request-id	-	-

Example Requests

Adding a tag to a cloud connection

```
POST /v3/{domain_id}/ccaas/cloud-connections/{id}/tag
{
  "tags": [ {
    "key": "key",
    "value": "value"
  } ]
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Adding a tag to a cloud connection

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

```
import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class TagCloudConnectionSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

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

        TagCloudConnectionRequest request = new TagCloudConnectionRequest();
        TagCloudConnectionRequestBody body = new TagCloudConnectionRequestBody();
        List<Tag> listbodyTags = new ArrayList<>();
        listbodyTags.add(
            new Tag()
                .withKey("key")
                .withValue("value")
        );
        body.withTags(listbodyTags);
        request.withBody(body);
        try {
            TagCloudConnectionResponse response = client.tagCloudConnection(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

Adding a tag to a cloud connection

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = TagCloudConnectionRequest()
        listTagsbody = [
            Tag(
                key="key",
                value="value"
            )
        ]
        request.body = TagCloudConnectionRequestBody(
            tags=listTagsbody
        )
        response = client.tag_cloud_connection(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

Adding a tag to a cloud connection

```
package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())
```

```
request := &model.TagCloudConnectionRequest{}
valueTags:= "value"
var listTagsbody = []model.Tag{
    {
        Key: "key",
        Value: &valueTags,
    },
}
request.Body = &model.TagCloudConnectionRequestBody{
    Tags: listTagsbody,
}
response, err := client.TagCloudConnection(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	The tag has been added to the cloud connection.

Error Codes

See [Error Codes](#).

4.1.7 Deleting a Tag from a Cloud Connection

Function

This API is used to delete a tag from a cloud connection.

Calling Method

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

URI

POST /v3/{domain_id}/ccaas/cloud-connections/{id}/untag

Table 4-34 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36

Request Parameters

Table 4-35 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-36 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of Tag objects	Tags. Array Length: 1 - 20

Table 4-37 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	No	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Response Parameters

Status code: 204

Table 4-38 Response header parameters

Parameter	Type	Description
x-request-id	-	-

Example Requests

Deleting a tag from a cloud connection

```
POST /v3/{domain_id}/ccaas/cloud-connections/{id}/untag
{
  "tags": [ {
    "key": "key",
    "value": "value"
  } ]
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Deleting a tag from a cloud connection

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class UntagCloudConnectionSolution {

    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");
```

```
ICredential auth = new GlobalCredentials()
    .withAk(ak)
    .withSk(sk);

CcClient client = CcClient.newBuilder()
    .withCredential(auth)
    .withRegion(CcRegion.valueOf("<YOUR REGION>"))
    .build();
UntagCloudConnectionRequest request = new UntagCloudConnectionRequest();
UntagCloudConnectionRequestBody body = new UntagCloudConnectionRequestBody();
List<Tag> listbodyTags = new ArrayList<>();
listbodyTags.add(
    new Tag()
        .withKey("key")
        .withValue("value")
);
body.withTags(listbodyTags);
request.withBody(body);
try {
    UntagCloudConnectionResponse response = client.untagCloudConnection(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

Deleting a tag from a cloud connection

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdccc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdccc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = UntagCloudConnectionRequest()
        listTagsbody = [
            Tag(
                key="key",
                value="value"
            )
        ]
```



```
]
request.body = UntagCloudConnectionRequestBody(
    tags=listTagsbody
)
response = client.untag_cloud_connection(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

Deleting a tag from a cloud connection

```
package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UntagCloudConnectionRequest{
        valueTags:= "value"
        var listTagsbody = []model.Tag{
            {
                Key: "key",
                Value: &valueTags,
            },
        }
    }
    request.Body = &model.UntagCloudConnectionRequestBody{
        Tags: listTagsbody,
    }
    response, err := client.UntagCloudConnection(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	The tag has been deleted from the cloud connection.

Error Codes

See [Error Codes](#).

4.1.8 Querying the Tags Added to a Cloud Connection

Function

This API is used to query the tags added to a cloud connection.

Calling Method

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

URI

GET /v3/{domain_id}/ccaas/cloud-connections/tags

Table 4-39 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Request Parameters

Table 4-40 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 200

Table 4-41 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
tags	Array of MultivaluedTag objects	All tags of the cloud connection. Array Length: 1 - 200

Table 4-42 MultivaluedTag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
values	Array of strings	List of values with the same key. Array Length: 1 - 20

Example Requests

Querying the tags added to a cloud connection

```
GET /v3/{domain_id}/ccaas/cloud-connections/tags
```

Example Responses

Status code: 200

Tags added to a cloud connection have been queried.

```
{
  "request_id" : "2f68486e542a0bb23ab86a826f909ecf",
  "tags" : [ {
    "key" : "key1",
    "values" : [ "value1" ]
  }, {
    "key" : "key2",
    "values" : [ "value2" ]
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class ListCloudConnectionTagsSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ListCloudConnectionTagsRequest request = new ListCloudConnectionTagsRequest();
        try {
            ListCloudConnectionTagsResponse response = client.listCloudConnectionTags(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")
```

```
credentials = GlobalCredentials(ak, sk) \

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

try:
    request = ListCloudConnectionTagsRequest()
    response = client.list_cloud_connection_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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Tags added to a cloud connection have been queried.

Error Codes

See [Error Codes](#).

4.1.9 Querying Cloud Connections by Tag

Function

This API is used to query cloud connections by tag.

Calling Method

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

URI

POST /v3/{domain_id}/ccaas/cloud-connections/filter

Table 4-43 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Request Parameters

Table 4-44 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-45 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of MultivaluedTag objects	Tags. Array Length: 1 - 20

Table 4-46 MultivaluedTag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
values	Yes	Array of strings	List of values with the same key. Array Length: 1 - 20

Response Parameters

Status code: 200

Table 4-47 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
page_info	PageInfo object	Pagination query information.
cloud_connections	Array of CloudConnection objects	Cloud connection list. Array Length: 0 - 2000

Table 4-48 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier. Minimum: 1 Maximum: 4096
previous_mar ker	String	Forward pagination identifier. Minimum: 1 Maximum: 4096
current_count	Integer	Number of the resources in the current list. Minimum: 0 Maximum: 2000

Table 4-49 CloudConnection

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
enterprise_pro ject_id	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
tags	Array of Tag objects	Resource tags. Array Length: 1 - 20
status	String	Cloud connection status. ACTIVE : The cloud connection is available. Minimum: 0 Maximum: 36

Parameter	Type	Description
admin_state_up	Boolean	Administrative status of the cloud connection.
used_scene	String	Cloud Connect application scenarios. VPC: Cloud Connect is used to connect VPCs. Default: vpc Minimum: 0 Maximum: 36
network_instance_number	Integer	Number of the network instances loaded to the cloud connection. Minimum: 0 Maximum: 10000
bandwidth_package_number	Integer	Number of the bandwidth packages bound to the cloud connection. Minimum: 0 Maximum: 10000
inter_region_bandwidth_number	Integer	Number of the inter-region bandwidths configured for the cloud connection. Minimum: 0 Maximum: 10000

Table 4-50 Tag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Example Requests

Querying cloud connections by tag

POST https://{cc_endpoint}/v3/{domain_id}/ccaas/cloud-connections/filter

```
{
  "tags": [ {
    "key": "key",
    "values": [ "value" ]
  } ]
}
```

```
    }]  
  }
```

Example Responses

Status code: 200

Cloud connections are queried by tag.

```
{  
  "request_id": "ab44eb7776995d84a7580fe6a7bd7629",  
  "cloud_connections": [ {  
    "status": "ACTIVE",  
    "id": "XXX",  
    "name": "cloud-connenction name",  
    "description": "cloud-connection description",  
    "domain_id": "XXX",  
    "created_at": "2023-09-20T08:28:28Z",  
    "updated_at": "2023-09-20T08:28:28Z",  
    "admin_state_up": true,  
    "used_scene": "vpc",  
    "enterprise_project_id": "0",  
    "network_instance_number": 0,  
    "bandwidth_package_number": 0,  
    "inter_region_bandwidth_number": 0,  
    "tags": [ {  
      "key": "key1",  
      "value": "value1"  
    }, {  
      "key": "key2",  
      "value": "value2"  
    } ]  
  } ],  
  "page_info": {  
    "previous_marker": "XXX",  
    "current_count": 30  
  }  
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Querying cloud connections by tag

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.GlobalCredentials;  
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.cc.v3.region.CcRegion;  
import com.huaweicloud.sdk.cc.v3.*;  
import com.huaweicloud.sdk.v3.model.*;  
  
import java.util.List;  
import java.util.ArrayList;  
  
public class ListCloudConnectionsByTagsSolution {  
    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");

ICredential auth = new GlobalCredentials()
    .withAk(ak)
    .withSk(sk);

CcClient client = CcClient.newBuilder()
    .withCredential(auth)
    .withRegion(CcRegion.valueOf("<YOUR REGION>"))
    .build();
ListCloudConnectionsByTagsRequest request = new ListCloudConnectionsByTagsRequest();
ListCloudConnectionsByTagsRequestBody body = new ListCloudConnectionsByTagsRequestBody();
List<String> listTagsValues = new ArrayList<>();
listTagsValues.add("value");
List<MultivaluedTag> listbodyTags = new ArrayList<>();
listbodyTags.add(
    new MultivaluedTag()
        .withKey("key")
        .withValues(listTagsValues)
);
body.withTags(listbodyTags);
request.withBody(body);
try {
    ListCloudConnectionsByTagsResponse response = client.listCloudConnectionsByTags(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

Querying cloud connections by tag

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

```
try:
    request = ListCloudConnectionsByTagsRequest()
    listValuesTags = [
        "value"
    ]
    listTagsbody = [
        MultivaluedTag(
            key="key",
            values=listValuesTags
        )
    ]
    request.body = ListCloudConnectionsByTagsRequestBody(
        tags=listTagsbody
    )
    response = client.list_cloud_connections_by_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

Querying cloud connections by tag

```
package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListCloudConnectionsByTagsRequest{}
    var listValuesTags = []string{
        "value",
    }
    var listTagsbody = []model.MultivaluedTag{
        {
            Key: "key",
            Values: listValuesTags,
        },
    },
    }
    request.Body = &model.ListCloudConnectionsByTagsRequestBody{
        Tags: listTagsbody,
```

```

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

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Cloud connections are queried by tag.

Error Codes

See [Error Codes](#).

4.2 Network Instances

4.2.1 Creating a Network Instance

Function

This API is used to create a network instance.

Calling Method

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

URI

POST /v3/{domain_id}/ccaas/network-instances

Table 4-51 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Request Parameters

Table 4-52 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-53 Request body parameters

Parameter	Mandatory	Type	Description
network_instance	Yes	CreateNetworkInstance object	Details of the network instance to be created.

Table 4-54 CreateNetworkInstance

Parameter	Mandatory	Type	Description
name	No	String	Resource name.
description	No	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
instance_id	Yes	String	Resource ID.
instance_domain_id	No	String	ID of the account that the instance belongs to.
project_id	Yes	String	Project ID.
region_id	Yes	String	Region ID.
cloud_connection_id	Yes	String	Resource ID.
type	Yes	String	Type of the network instance to be added to the cloud connection. <ul style="list-style-type: none"> vpc: a VPC vgw: a virtual gateway Minimum: 0 Maximum: 36

Parameter	Mandatory	Type	Description
cidrs	Yes	Array of strings	CIDR block routes advertised by the network instance. Minimum: 0 Maximum: 64 Array Length: 0 - 1000

Response Parameters

Status code: 201

Table 4-55 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
network_instance	NetworkInstance object	Network instance.

Table 4-56 NetworkInstance

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
cloud_connection_id	String	Resource ID.
instance_id	String	Resource ID.

Parameter	Type	Description
instance_domain_id	String	ID of the account that the instance belongs to.
region_id	String	Region ID.
project_id	String	Project ID.
status	String	Status of the network instance. <ul style="list-style-type: none"> ● ACTIVE: The processing is successful. ● PENDING: The network instance is being processed. ● ERROR: The processing failed. Minimum: 0 Maximum: 36
type	String	Type of the network instance. <ul style="list-style-type: none"> ● vpc: a VPC ● vgw: a virtual gateway Minimum: 0 Maximum: 36
cidrs	Array of strings	CIDR block routes advertised by the network instance. Minimum: 0 Maximum: 64 Array Length: 0 - 1000

Example Requests

Creating a VPC with its subnet CIDR blocks specified

```
POST https://{cc_endpoint}/v3/{domain_id}/ccaas/network-instances
```

```
{
  "network_instance" : {
    "type" : "vpc",
    "region_id" : "cn-north-4",
    "project_id" : "XXX",
    "cloud_connection_id" : "XXX",
    "instance_id" : "XXX",
    "cidrs" : [ "192.168.1.0/24" ]
  }
}
```

Example Responses

Status code: 201

The network instance has been created.

```
{
  "request_id" : "c8fe3d71352e273915bfbfd74ce58368a",
}
```



```
"network_instance" : {
  "id" : "XXX",
  "name" : "",
  "description" : "",
  "domain_id" : "XXX",
  "created_at" : "2023-09-20T09:33:15Z",
  "updated_at" : "2023-09-20T09:33:16Z",
  "project_id" : "XXX",
  "instance_domain_id" : "",
  "cloud_connection_id" : "XXX",
  "region_id" : "cn-north-4",
  "type" : "vpc",
  "instance_id" : "XXX",
  "cidrs" : [ "192.168.1.0/24" ],
  "status" : "ACTIVE"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Creating a VPC with its subnet CIDR blocks specified

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateNetworkInstanceSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateNetworkInstanceRequest request = new CreateNetworkInstanceRequest();
        CreateNetworkInstanceRequestBody body = new CreateNetworkInstanceRequestBody();
        List<String> listNetworkInstanceCidrs = new ArrayList<>();
        listNetworkInstanceCidrs.add("192.168.1.0/24");
        CreateNetworkInstance networkInstancebody = new CreateNetworkInstance();
        networkInstancebody.withInstanceid("XXX")
            .withProjectid("XXX")
            .withRegionid("cn-north-4")
    }
}
```

```
.withCidrs(listNetworkInstanceCidrs)
.withType(CreateNetworkInstance.TypeEnum.fromValue("vpc"))
.withCloudConnectionId("XXX");
body.withNetworkInstance(networkInstancebody);
request.withBody(body);
try {
    CreateNetworkInstanceResponse response = client.createNetworkInstance(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

Creating a VPC with its subnet CIDR blocks specified

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = CreateNetworkInstanceRequest()
        listCidrsNetworkInstance = [
            "192.168.1.0/24"
        ]
        networkInstancebody = CreateNetworkInstance(
            instance_id="XXX",
            project_id="XXX",
            region_id="cn-north-4",
            cidrs=listCidrsNetworkInstance,
            type="vpc",
            cloud_connection_id="XXX"
        )
        request.body = CreateNetworkInstanceRequestBody(
            network_instance=networkInstancebody
        )
        response = client.create_network_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

Creating a VPC with its subnet CIDR blocks specified

```
package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateNetworkInstanceRequest{}
    var listCidrsNetworkInstance = []string{
        "192.168.1.0/24",
    }
    networkInstancebody := &model.CreateNetworkInstance{
        InstanceId: "XXX",
        ProjectId: "XXX",
        RegionId: "cn-north-4",
        Cidrs: listCidrsNetworkInstance,
        Type: model.GetCreateNetworkInstanceTypeEnum().VPC,
        CloudConnectionId: "XXX",
    }
    request.Body = &model.CreateNetworkInstanceRequestBody{
        NetworkInstance: networkInstancebody,
    }
    response, err := client.CreateNetworkInstance(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
201	The network instance has been created.

Error Codes

See [Error Codes](#).

4.2.2 Querying the Network Instance List

Function

This API is used to query the network instance list.

Parameters **marker** and **limit** are used for pagination query. The two parameters take effect only when they are used together.

Calling Method

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

URI

GET /v3/{domain_id}/ccaas/network-instances

Table 4-57 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Table 4-58 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 1000 Minimum: 1 Maximum: 1000 Default: 1000

Parameter	Mandatory	Type	Description
marker	No	String	Pagination query information. You can obtain the marker values from the response of the last API call. You can enter the marker value of the previous page or the next page. If you enter the marker value of the previous page, the previous page will be queried. If you enter the marker value of the next page, the next page will be queried. During pagination query, the query criteria, including the filters, sorting criteria, and the limit value, cannot be modified. Minimum: 1 Maximum: 4096
id	No	Array	Resource ID. Multiple IDs can be queried. Array Length: 1 - 20
name	No	Array	Resource name. Multiple names can be queried. Array Length: 1 - 20
description	No	Array	Description. Multiple descriptions can be queried. Array Length: 1 - 20
cloud_connect ion_id	No	Array	Cloud connection IDs. Array Length: 1 - 20
status	No	Array	Network instance status. ACTIVE : Network instances are available. Array Length: 1 - 10
type	No	Array	Type used to query network instances. Array Length: 1 - 10
instance_id	No	Array	Network instance ID used for query. Array Length: 1 - 10

Parameter	Mandatory	Type	Description
region_id	No	Array	Region where network instances are deployed. Array Length: 1 - 10

Request Parameters

Table 4-59 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 200

Table 4-60 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
page_info	PageInfo object	Pagination query information.
network_instances	Array of NetworkInstance objects	Network instance list. Array Length: 0 - 2000

Table 4-61 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier. Minimum: 1 Maximum: 4096

Parameter	Type	Description
previous_marker	String	Forward pagination identifier. Minimum: 1 Maximum: 4096
current_count	Integer	Number of the resources in the current list. Minimum: 0 Maximum: 2000

Table 4-62 NetworkInstance

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
cloud_connection_id	String	Resource ID.
instance_id	String	Resource ID.
instance_domain_id	String	ID of the account that the instance belongs to.
region_id	String	Region ID.
project_id	String	Project ID.
status	String	Status of the network instance. <ul style="list-style-type: none"> ● ACTIVE: The processing is successful. ● PENDING: The network instance is being processed. ● ERROR: The processing failed. Minimum: 0 Maximum: 36

Parameter	Type	Description
type	String	Type of the network instance. <ul style="list-style-type: none"> • vpc: a VPC • vgw: a virtual gateway Minimum: 0 Maximum: 36
cidrs	Array of strings	CIDR block routes advertised by the network instance. Minimum: 0 Maximum: 64 Array Length: 0 - 1000

Example Requests

Querying the network instance list

```
GET https://{cc_endpoint}/v3/{domain_id}/ccaas/network-instances
```

Example Responses

Status code: 200

The network instance list has been queried.

```
{
  "request_id" : "b961d5fcda6b993b5b750f1b96e484e0",
  "network_instances" : [ {
    "id" : "XXX",
    "name" : "",
    "description" : "",
    "domain_id" : "XXX",
    "created_at" : "2023-09-20T09:33:15Z",
    "updated_at" : "2023-09-20T09:33:16Z",
    "project_id" : "XXX",
    "instance_domain_id" : "",
    "cloud_connection_id" : "XXX",
    "region_id" : "cn-north-4",
    "type" : "vpc",
    "instance_id" : "XXX",
    "cidrs" : [ "192.168.1.0/24" ],
    "status" : "ACTIVE"
  } ],
  "page_info" : {
    "previous_marker" : "XXX",
    "current_count" : 1
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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



```
import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListNetworkInstancesSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ListNetworkInstancesRequest request = new ListNetworkInstancesRequest();
        request.withStatus();
        request.withType();
        request.withInstanceld();
        request.withRegionId();
        request.withLimit(<limit>);
        request.withMarker("<marker>");
        request.withId();
        request.withName();
        request.withDescription();
        request.withCloudConnectionId();
        try {
            ListNetworkInstancesResponse response = client.listNetworkInstances(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdccc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdccc.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 = __import__('os').getenv("CLOUD_SDK_AK")
sk = __import__('os').getenv("CLOUD_SDK_SK")

credentials = GlobalCredentials(ak, sk) \

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

try:
    request = ListNetworkInstancesRequest()
    request.status =
    request.type =
    request.instance_id =
    request.region_id =
    request.limit = <limit>
    request.marker = "<marker>"
    request.id =
    request.name =
    request.description =
    request.cloud_connection_id =
    response = client.list_network_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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListNetworkInstancesRequest{}
    limitRequest:= int32(<limit>)
```

```

request.Limit = &limitRequest
markerRequest:= "<marker>"
request.Marker = &markerRequest
response, err := client.ListNetworkInstances(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The network instance list has been queried.

Error Codes

See [Error Codes](#).

4.2.3 Querying a Network Instance

Function

This API is used to query the details of a network instance.

Calling Method

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

URI

GET /v3/{domain_id}/ccaas/network-instances/{id}

Table 4-63 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36

Request Parameters

Table 4-64 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 200

Table 4-65 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
network_instance	NetworkInstance object	Network instance.

Table 4-66 NetworkInstance

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.

Parameter	Type	Description
cloud_connect ion_id	String	Resource ID.
instance_id	String	Resource ID.
instance_dom ain_id	String	ID of the account that the instance belongs to.
region_id	String	Region ID.
project_id	String	Project ID.
status	String	Status of the network instance. <ul style="list-style-type: none"> ● ACTIVE: The processing is successful. ● PENDING: The network instance is being processed. ● ERROR: The processing failed. Minimum: 0 Maximum: 36
type	String	Type of the network instance. <ul style="list-style-type: none"> ● vpc: a VPC ● vgw: a virtual gateway Minimum: 0 Maximum: 36
cidrs	Array of strings	CIDR block routes advertised by the network instance. Minimum: 0 Maximum: 64 Array Length: 0 - 1000

Example Requests

Querying the details of a network instance

```
GET https://{cc_endpoint}/v3/{domain_id}/ccaas/network-instances/{id}
```

Example Responses

Status code: 200

The details of a network instance have been queried.

```
{
  "request_id" : "b961d5fcda6b993b5b750f1b96e484e0",
  "network_instance" : {
    "id" : "XXX",
    "name" : "",
    "description" : ""
  }
}
```

```
"domain_id" : "XXX",
"created_at" : "2023-09-20T09:33:15Z",
"updated_at" : "2023-09-20T09:33:16Z",
"project_id" : "XXX",
"instance_domain_id" : "",
"cloud_connection_id" : "XXX",
"region_id" : "cn-north-4",
"type" : "vpc",
"instance_id" : "XXX",
"cidrs" : [ "192.168.1.0/24" ],
"status" : "ACTIVE"
}
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class ShowNetworkInstanceSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowNetworkInstanceRequest request = new ShowNetworkInstanceRequest();
        try {
            ShowNetworkInstanceResponse response = client.showNetworkInstance(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ShowNetworkInstanceRequest()
        response = client.show_network_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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowNetworkInstanceRequest{}
    response, err := client.ShowNetworkInstance(request)
```

```

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

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The details of a network instance have been queried.

Error Codes

See [Error Codes](#).

4.2.4 Updating a Network Instance

Function

This API is used to update a network instance.

Calling Method

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

URI

PUT /v3/{domain_id}/ccaas/network-instances/{id}

Table 4-67 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36

Request Parameters

Table 4-68 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-69 Request body parameters

Parameter	Mandatory	Type	Description
network_instance	Yes	UpdateNetworkInstance object	Details of the network instance to be updated.

Table 4-70 UpdateNetworkInstance

Parameter	Mandatory	Type	Description
name	No	String	Resource name.
description	No	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
cidrs	No	Array of strings	CIDR block routes advertised by the network instance. Minimum: 0 Maximum: 64 Array Length: 0 - 1000

Response Parameters

Status code: 200

Table 4-71 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
network_instance	NetworkInstance object	Network instance.

Table 4-72 NetworkInstance

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
cloud_connection_id	String	Resource ID.
instance_id	String	Resource ID.
instance_domain_id	String	ID of the account that the instance belongs to.
region_id	String	Region ID.
project_id	String	Project ID.
status	String	Status of the network instance. <ul style="list-style-type: none"> ● ACTIVE: The processing is successful. ● PENDING: The network instance is being processed. ● ERROR: The processing failed. Minimum: 0 Maximum: 36

Parameter	Type	Description
type	String	Type of the network instance. <ul style="list-style-type: none"> • vpc: a VPC • vgw: a virtual gateway Minimum: 0 Maximum: 36
cidrs	Array of strings	CIDR block routes advertised by the network instance. Minimum: 0 Maximum: 64 Array Length: 0 - 1000

Example Requests

Updating the description of a network instance

PUT https://{cc_endpoint}/v3/{domain_id}/ccaas/network-instances/{id}

```
{
  "network_instance" : {
    "description" : "new description"
  }
}
```

Example Responses

Status code: 200

The network instance has been updated.

```
{
  "request_id" : "1e3cd137d7c27ad139886f23ade736b0",
  "network_instance" : {
    "id" : "XXX",
    "name" : "",
    "description" : "new description",
    "domain_id" : "XXX",
    "created_at" : "2023-09-20T09:33:15Z",
    "updated_at" : "2023-09-21T03:28:08Z",
    "project_id" : "XXX",
    "instance_domain_id" : "",
    "cloud_connection_id" : "XXX",
    "region_id" : "cn-north-4",
    "type" : "vpc",
    "instance_id" : "0a6904ae-04d2-42ff-91d5-7d421c60a04c",
    "cidrs" : [ "192.168.1.0/24" ],
    "status" : "ACTIVE"
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Updating the description of a network instance

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class UpdateNetworkInstanceSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdateNetworkInstanceRequest request = new UpdateNetworkInstanceRequest();
        UpdateNetworkInstanceRequestBody body = new UpdateNetworkInstanceRequestBody();
        UpdateNetworkInstance networkInstancebody = new UpdateNetworkInstance();
        networkInstancebody.withDescription("new description");
        body.withNetworkInstance(networkInstancebody);
        request.withBody(body);
        try {
            UpdateNetworkInstanceResponse response = client.updateNetworkInstance(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

Updating the description of a network instance

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = UpdateNetworkInstanceRequest()
        networkInstancebody = UpdateNetworkInstance(
            description="new description"
        )
        request.body = UpdateNetworkInstanceRequestBody(
            network_instance=networkInstancebody
        )
        response = client.update_network_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

Updating the description of a network instance

```
package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateNetworkInstanceRequest{
        descriptionNetworkInstance:= "new description"
    }
```

```

networkInstancebody := &model.UpdateNetworkInstance{
    Description: &descriptionNetworkInstance,
}
request.Body = &model.UpdateNetworkInstanceRequestBody{
    NetworkInstance: networkInstancebody,
}
response, err := client.UpdateNetworkInstance(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
    
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The network instance has been updated.

Error Codes

See [Error Codes](#).

4.2.5 Removing a Network Instance

Function

This API is used to remove a network instance.

Calling Method

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

URI

DELETE /v3/{domain_id}/ccaas/network-instances/{id}

Table 4-73 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Parameter	Mandatory	Type	Description
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36

Request Parameters

Table 4-74 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

None

Example Requests

Removing a network instance

```
DELETE https://{cc_endpoint}/v3/{domain_id}/ccaas/network-instances/{id}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class DeleteNetworkInstanceSolution {

    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");

ICredential auth = new GlobalCredentials()
    .withAk(ak)
    .withSk(sk);

CcClient client = CcClient.newBuilder()
    .withCredential(auth)
    .withRegion(CcRegion.valueOf("<YOUR REGION>"))
    .build();
DeleteNetworkInstanceRequest request = new DeleteNetworkInstanceRequest();
try {
    DeleteNetworkInstanceResponse response = client.deleteNetworkInstance(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = DeleteNetworkInstanceRequest()
        response = client.delete_network_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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	The network instance has been removed.

Error Codes

See [Error Codes](#).

4.3 Bandwidth Packages

4.3.1 Creating a Bandwidth Package

Function

This API is used to create a bandwidth package.

Calling Method

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

URI

POST /v3/{domain_id}/ccaas/bandwidth-packages

Table 4-75 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Request Parameters

Table 4-76 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-77 Request body parameters

Parameter	Mandatory	Type	Description
bandwidth_package	Yes	CreateBandwidthPackage object	Request body for creating a bandwidth package.

Table 4-78 CreateBandwidthPackage

Parameter	Mandatory	Type	Description
name	Yes	String	Resource name.

Parameter	Mandatory	Type	Description
description	No	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
enterprise_project_id	No	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
project_id	Yes	String	Project ID.
local_area_id	Yes	String	Geographic region. Cloud Connect is available in the following geographic regions: <ul style="list-style-type: none"> • Chinese-Mainland Chinese mainland • Asia-Pacific Asia Pacific • Africa Southern Africa • Western-Latin-America Western Latin America • Eastern-Latin-America Eastern Latin America • Northern-Latin-America Northern Latin America
remote_area_id	Yes	String	Geographic region. Cloud Connect is available in the following geographic regions: <ul style="list-style-type: none"> • Chinese-Mainland Chinese mainland • Asia-Pacific Asia Pacific • Africa Southern Africa • Western-Latin-America Western Latin America • Eastern-Latin-America Eastern Latin America • Northern-Latin-America Northern Latin America

Parameter	Mandatory	Type	Description
charge_mode	Yes	String	Bandwidth package billing option. bandwidth : The bandwidth is billed by fixed bandwidth. Minimum: 0 Maximum: 64
billing_mode	Yes	Integer	Billing mode of the bandwidth package on the Chinese Mainland website or the International website. <ul style="list-style-type: none"> • 3: pay-per-use on the Chinese Mainland website • 4: pay-per-use on the International website • 5: 95th percentile bandwidth billing on the Chinese Mainland website • 6: 95th percentile bandwidth billing on the International website
bandwidth	Yes	Integer	Bandwidth range specified for the bandwidth package. Minimum: 2 Maximum: 999999
resource_id	No	String	ID of the resource that the bandwidth package is bound to. Minimum: 0 Maximum: 36
resource_type	No	String	Type of the resource that the bandwidth package is bound to. cloud_connection : The bandwidth package is bound to a cloud connection. Minimum: 0 Maximum: 36

Parameter	Mandatory	Type	Description
spec_code	No	String	<p>Specification code of the bandwidth package.</p> <ul style="list-style-type: none"> ● bandwidth.aftoela: Southern Africa-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.aftonla: Southern Africa-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.aftowla: Southern Africa-Western Latin America on both the Chinese Mainland website and International website ● bandwidth.aptoaf: Asia Pacific-Southern Africa on the International website ● bandwidth.aptoap: Asia Pacific on the International website ● bandwidth.aptoela: Asia Pacific-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.aptonla: Asia Pacific-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.aptowla: Asia Pacific-Western Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtoaf: Chinese mainland-Southern Africa on the International website ● bandwidth.cmtoap: Chinese mainland-Asia Pacific on the International website

Parameter	Mandatory	Type	Description
			<ul style="list-style-type: none"> ● bandwidth.cmtocm: Chinese mainland on the International website ● bandwidth.cmtoela: Chinese mainland-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtomla: Chinese mainland-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtowla: Chinese mainland-Western Latin America on both the Chinese Mainland website and International website ● bandwidth.elatoela: Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.elatomla: Eastern Latin America-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.wlatoela: Western Latin America-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.wlatomla: Western Latin America-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.wlatowla: Western Latin America on both the Chinese Mainland website and International website <p>Minimum: 0</p>

Parameter	Mandatory	Type	Description
			Maximum: 32
interflow_mode	No	String	Bandwidth package applicability. <ul style="list-style-type: none"> • Area: geographic regions • Region: cloud regions Minimum: 0 Maximum: 36

Response Parameters

Status code: 201

Table 4-79 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
bandwidth_package	BandwidthPackage object	Bandwidth package.

Table 4-80 BandwidthPackage

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
enterprise_project_id	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
project_id	String	Project ID.

Parameter	Type	Description
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
resource_id	String	ID of the resource that the bandwidth package is bound to. Minimum: 0 Maximum: 36
resource_type	String	Type of the resource that the bandwidth package is bound to. cloud_connection : a cloud connection Minimum: 0 Maximum: 32
local_area_id	String	Geographic region. Cloud Connect is available in the following geographic regions: <ul style="list-style-type: none"> • Chinese-Mainland Chinese mainland • Asia-Pacific Asia Pacific • Africa Southern Africa • Western-Latin-America Western Latin America • Eastern-Latin-America Eastern Latin America • Northern-Latin-America Northern Latin America
remote_area_id	String	Geographic region. Cloud Connect is available in the following geographic regions: <ul style="list-style-type: none"> • Chinese-Mainland Chinese mainland • Asia-Pacific Asia Pacific • Africa Southern Africa • Western-Latin-America Western Latin America • Eastern-Latin-America Eastern Latin America • Northern-Latin-America Northern Latin America

Parameter	Type	Description
spec_code	String	<p>Specification code of the bandwidth package.</p> <ul style="list-style-type: none"> ● bandwidth.aftoela: Southern Africa-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.aftonla: Southern Africa-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.aftowla: Southern Africa-Western Latin America on both the Chinese Mainland website and International website ● bandwidth.aptoaf: Asia Pacific-Southern Africa on the International website ● bandwidth.aptoap: Asia Pacific on the International website ● bandwidth.aptoela: Asia Pacific-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.aptonla: Asia Pacific-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.aptowla: Asia Pacific-Western Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtoaf: Chinese mainland-Southern Africa on the International website ● bandwidth.cmtoap: Chinese mainland-Asia Pacific on the International website ● bandwidth.cmtocm: Chinese mainland on the International website ● bandwidth.cmtoela: Chinese mainland-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtonla: Chinese mainland-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtowla: Chinese mainland-Western Latin America on both the Chinese Mainland website and International website ● bandwidth.elatoela: Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.elatonla: Eastern Latin America-Northern Latin America on both the Chinese Mainland website and International website

Parameter	Type	Description
		<ul style="list-style-type: none"> • bandwidth.wlatoela: Western Latin America-Eastern Latin America on both the Chinese Mainland website and International website • bandwidth.wlatonla: Western Latin America-Northern Latin America on both the Chinese Mainland website and International website • bandwidth.wlatowla: Western Latin America on both the Chinese Mainland website and International website <p>Minimum: 0 Maximum: 32</p>
billing_mode	Integer	<p>Billing mode of the bandwidth package on the Chinese Mainland website or the International website.</p> <ul style="list-style-type: none"> • 1: yearly/monthly on the Chinese Mainland website • 2: yearly/monthly on the International website • 3: pay-per-use on the Chinese Mainland website • 4: pay-per-use on the International website • 5: 95th percentile bandwidth billing on the Chinese Mainland website • 6: 95th percentile bandwidth billing on the International website
tags	Array of Tag objects	<p>Resource tags.</p> <p>Array Length: 1 - 20</p>
status	String	<p>Status of the bandwidth package.</p> <p>ACTIVE: The bandwidth package is available.</p> <p>Minimum: 0 Maximum: 36</p>
admin_state_up	Boolean	<p>Administrative status of the bandwidth package.</p>
order_id	String	<p>Order ID of the bandwidth package.</p> <p>Minimum: 0 Maximum: 32</p>
product_id	String	<p>Product ID of the bandwidth package.</p> <p>Minimum: 0 Maximum: 36</p>

Parameter	Type	Description
charge_mode	String	Bandwidth billing option. The bandwidth is billed by fixed bandwidth. Minimum: 0 Maximum: 64
bandwidth	Integer	Bandwidth range specified for the bandwidth package. Minimum: 2 Maximum: 999999
interflow_mode	String	Bandwidth package applicability. <ul style="list-style-type: none"> • Area: geographic regions • Region: cloud regions Minimum: 0 Maximum: 32

Table 4-81 Tag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Example Requests

Creating a 5-Mbit/s bandwidth package with both geographic regions specified

POST https://{cc_endpoint}/v3/{domain_id}/ccaas/bandwidth-packages

```
{
  "bandwidth_package": {
    "project_id": "XXX",
    "name": "test_bwp_name",
    "local_area_id": "Chinese-Mainland",
    "remote_area_id": "Chinese-Mainland",
    "bandwidth": 5,
    "charge_mode": "bandwidth",
    "billing_mode": 5,
    "interflow_mode": "Area",
    "enterprise_project_id": "0"
  }
}
```

Example Responses

Status code: 201

The bandwidth package has been created.

```
{
  "request_id" : "61126320a1802d5c6444f9d2d76526c2",
  "bandwidth_package" : {
    "bandwidth" : 5,
    "status" : "ACTIVE",
    "id" : "XXXXX",
    "name" : "test_bwp_name",
    "description" : "",
    "domain_id" : "XXX",
    "created_at" : "2023-09-20T08:37:15Z",
    "updated_at" : "2023-09-20T08:37:15Z",
    "project_id" : "XXX",
    "resource_type" : "",
    "resource_id" : "",
    "local_area_id" : "Chinese-Mainland",
    "remote_area_id" : "Chinese-Mainland",
    "admin_state_up" : true,
    "charge_mode" : "bandwidth",
    "billing_mode" : "3",
    "spec_code" : "bandwidth.cmtocm",
    "order_id" : "",
    "product_id" : "",
    "enterprise_project_id" : "0",
    "tags" : [],
    "interflow_mode" : "Area"
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Creating a 5-Mbit/s bandwidth package with both geographic regions specified

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class CreateBandwidthPackageSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
```

```
.withSk(sk);

CcClient client = CcClient.newBuilder()
    .withCredential(auth)
    .withRegion(CcRegion.valueOf("<YOUR REGION>"))
    .build();
CreateBandwidthPackageRequest request = new CreateBandwidthPackageRequest();
CreateBandwidthPackageRequestBody body = new CreateBandwidthPackageRequestBody();
CreateBandwidthPackage bandwidthPackagebody = new CreateBandwidthPackage();
bandwidthPackagebody.withBillingMode(CreateBandwidthPackage.BillingModeEnum.NUMBER_5)
    .withBandwidth(5)
    .withChargeMode(CreateBandwidthPackage.ChargeModeEnum.fromValue("bandwidth"))
    .withRemoteAreaId(CreateBandwidthPackage.RemoteAreaIdEnum.fromValue("Chinese-Mainland"))
    .withEnterpriseProjectId("0")
    .withProjectId("XXX")
    .withName("test_bwp_name")
    .withLocalAreaId(CreateBandwidthPackage.LocalAreaIdEnum.fromValue("Chinese-Mainland"))
    .withInterflowMode(CreateBandwidthPackage.InterflowModeEnum.fromValue("Area"));
body.withBandwidthPackage(bandwidthPackagebody);
request.withBody(body);
try {
    CreateBandwidthPackageResponse response = client.createBandwidthPackage(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

Creating a 5-Mbit/s bandwidth package with both geographic regions specified

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = CreateBandwidthPackageRequest()
        bandwidthPackagebody = CreateBandwidthPackage(
            billing_mode=5,
            bandwidth=5,
```

```
        charge_mode="bandwidth",
        remote_area_id="Chinese-Mainland",
        enterprise_project_id="0",
        project_id="XXX",
        name="test_bwp_name",
        local_area_id="Chinese-Mainland",
        interflow_mode="Area"
    )
    request.body = CreateBandwidthPackageRequestBody(
        bandwidth_package=bandwidthPackagebody
    )
    response = client.create_bandwidth_package(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

Creating a 5-Mbit/s bandwidth package with both geographic regions specified

```
package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateBandwidthPackageRequest{}
    remoteAreaIdBandwidthPackage:=
model.GetCreateBandwidthPackageRemoteAreaIdEnum().CHINESE_MAINLAND
    enterpriseProjectIdBandwidthPackage:= "0"
    localAreaIdBandwidthPackage:=
model.GetCreateBandwidthPackageLocalAreaIdEnum().CHINESE_MAINLAND
    interflowModeBandwidthPackage:= model.GetCreateBandwidthPackageInterflowModeEnum().AREA
    bandwidthPackagebody := &model.CreateBandwidthPackage{
        BillingMode: model.GetCreateBandwidthPackageBillingModeEnum().E_5,
        Bandwidth: int32(5),
        ChargeMode: model.GetCreateBandwidthPackageChargeModeEnum().BANDWIDTH,
        RemoteAreaId: &remoteAreaIdBandwidthPackage,
        EnterpriseProjectId: &enterpriseProjectIdBandwidthPackage,
        ProjectId: "XXX",
        Name: "test_bwp_name",
        LocalAreaId: &localAreaIdBandwidthPackage,
```

```

    InterflowMode: &interflowModeBandwidthPackage,
  }
  request.Body = &model.CreateBandwidthPackageRequestBody{
    BandwidthPackage: bandwidthPackagebody,
  }
  response, err := client.CreateBandwidthPackage(request)
  if err == nil {
    fmt.Printf("%+v\n", response)
  } else {
    fmt.Println(err)
  }
}

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
201	The bandwidth package has been created.

Error Codes

See [Error Codes](#).

4.3.2 Querying the Bandwidth Package List

Function

This API is used to query the bandwidth package list.

Parameters **marker** and **limit** are used for pagination query. The two parameters take effect only when they are used together.

Calling Method

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

URI

GET /v3/{domain_id}/ccaas/bandwidth-packages

Table 4-82 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Table 4-83 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 1000 Minimum: 1 Maximum: 1000 Default: 1000
marker	No	String	Pagination query information. You can obtain the marker values from the response of the last API call. You can enter the marker value of the previous page or the next page. If you enter the marker value of the previous page, the previous page will be queried. If you enter the marker value of the next page, the next page will be queried. During pagination query, the query criteria, including the filters, sorting criteria, and the limit value, cannot be modified. Minimum: 1 Maximum: 4096
id	No	Array	Resource ID. Multiple IDs can be queried. Array Length: 1 - 20
name	No	Array	Resource name. Multiple names can be queried. Array Length: 1 - 20
enterprise_project_id	No	Array	Enterprise project IDs. Array Length: 1 - 20
cloud_connection_id	No	Array	Cloud connection IDs. Array Length: 1 - 20
status	No	Array	Bandwidth package status. ACTIVE : Bandwidth packages are available. Array Length: 1 - 10

Parameter	Mandatory	Type	Description
billing_mode	No	Array	Billing mode used to query bandwidth packages. Array Length: 1 - 10
resource_id	No	Array	Cloud connection ID used to query bandwidth packages. Array Length: 1 - 10

Request Parameters

Table 4-84 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: **200**

Table 4-85 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
page_info	PageInfo object	Pagination query information.
bandwidth_packages	Array of BandwidthPackage objects	Bandwidth package list. Array Length: 0 - 2000

Table 4-86 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier. Minimum: 1 Maximum: 4096
previous_mar ker	String	Forward pagination identifier. Minimum: 1 Maximum: 4096
current_count	Integer	Number of the resources in the current list. Minimum: 0 Maximum: 2000

Table 4-87 BandwidthPackage

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
enterprise_pro ject_id	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
project_id	String	Project ID.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
resource_id	String	ID of the resource that the bandwidth package is bound to. Minimum: 0 Maximum: 36

Parameter	Type	Description
resource_type	String	Type of the resource that the bandwidth package is bound to. cloud_connection : a cloud connection Minimum: 0 Maximum: 32
local_area_id	String	Geographic region. Cloud Connect is available in the following geographic regions: <ul style="list-style-type: none">• Chinese-Mainland Chinese mainland • Asia-Pacific Asia Pacific • Africa Southern Africa • Western-Latin-America Western Latin America • Eastern-Latin-America Eastern Latin America • Northern-Latin-America Northern Latin America
remote_area_id	String	Geographic region. Cloud Connect is available in the following geographic regions: <ul style="list-style-type: none">• Chinese-Mainland Chinese mainland • Asia-Pacific Asia Pacific • Africa Southern Africa • Western-Latin-America Western Latin America • Eastern-Latin-America Eastern Latin America • Northern-Latin-America Northern Latin America

Parameter	Type	Description
spec_code	String	<p>Specification code of the bandwidth package.</p> <ul style="list-style-type: none"> ● bandwidth.aftoela: Southern Africa-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.aftonla: Southern Africa-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.aftowla: Southern Africa-Western Latin America on both the Chinese Mainland website and International website ● bandwidth.aptoaf: Asia Pacific-Southern Africa on the International website ● bandwidth.aptoap: Asia Pacific on the International website ● bandwidth.aptoela: Asia Pacific-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.aptonla: Asia Pacific-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.aptowla: Asia Pacific-Western Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtoaf: Chinese mainland-Southern Africa on the International website ● bandwidth.cmtoap: Chinese mainland-Asia Pacific on the International website ● bandwidth.cmtocm: Chinese mainland on the International website ● bandwidth.cmtoela: Chinese mainland-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtonla: Chinese mainland-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtowla: Chinese mainland-Western Latin America on both the Chinese Mainland website and International website ● bandwidth.elatoela: Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.elatonla: Eastern Latin America-Northern Latin America on both the Chinese Mainland website and International website

Parameter	Type	Description
		<ul style="list-style-type: none"> • bandwidth.wlatoela: Western Latin America-Eastern Latin America on both the Chinese Mainland website and International website • bandwidth.wlatonla: Western Latin America-Northern Latin America on both the Chinese Mainland website and International website • bandwidth.wlatowla: Western Latin America on both the Chinese Mainland website and International website <p>Minimum: 0 Maximum: 32</p>
billing_mode	Integer	<p>Billing mode of the bandwidth package on the Chinese Mainland website or the International website.</p> <ul style="list-style-type: none"> • 1: yearly/monthly on the Chinese Mainland website • 2: yearly/monthly on the International website • 3: pay-per-use on the Chinese Mainland website • 4: pay-per-use on the International website • 5: 95th percentile bandwidth billing on the Chinese Mainland website • 6: 95th percentile bandwidth billing on the International website
tags	Array of Tag objects	<p>Resource tags.</p> <p>Array Length: 1 - 20</p>
status	String	<p>Status of the bandwidth package.</p> <p>ACTIVE: The bandwidth package is available.</p> <p>Minimum: 0 Maximum: 36</p>
admin_state_up	Boolean	<p>Administrative status of the bandwidth package.</p>
order_id	String	<p>Order ID of the bandwidth package.</p> <p>Minimum: 0 Maximum: 32</p>
product_id	String	<p>Product ID of the bandwidth package.</p> <p>Minimum: 0 Maximum: 36</p>

Parameter	Type	Description
charge_mode	String	Bandwidth billing option. The bandwidth is billed by fixed bandwidth. Minimum: 0 Maximum: 64
bandwidth	Integer	Bandwidth range specified for the bandwidth package. Minimum: 2 Maximum: 999999
interflow_mode	String	Bandwidth package applicability. <ul style="list-style-type: none"> • Area: geographic regions • Region: cloud regions Minimum: 0 Maximum: 32

Table 4-88 Tag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Example Requests

Querying the bandwidth package list

```
GET https://{cc_endpoint}/v3/{domain_id}/ccaas/bandwidth-packages
```

Example Responses

Status code: 200

The bandwidth package list has been queried.

```
{
  "request_id" : "61126320a1802d5c6444f9d2d76526c2",
  "bandwidth_packages" : [ {
    "bandwidth" : 5,
    "status" : "ACTIVE",
    "id" : "XXXXX",
    "name" : "test_bwp_name",
    "description" : ""
  }
]
```

```
"domain_id" : "XXX",
"created_at" : "2023-09-20T08:37:15Z",
"updated_at" : "2023-09-20T08:37:15Z",
"project_id" : "XXX",
"resource_type" : "",
"resource_id" : "",
"local_area_id" : "Chinese-Mainland",
"remote_area_id" : "Chinese-Mainland",
"admin_state_up" : true,
"charge_mode" : "bandwidth",
"billing_mode" : "3",
"spec_code" : "bandwidth.cmtocm",
"order_id" : "",
"product_id" : "",
"enterprise_project_id" : "0",
"tags" : [ ],
"interflow_mode" : "Area"
}],
"page_info" : {
  "next_marker" : "XXX",
  "previous_marker" : "XXX",
  "current_count" : 1
}
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListBandwidthPackagesSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ListBandwidthPackagesRequest request = new ListBandwidthPackagesRequest();
        request.withStatus();
        request.withBillingMode();
        request.withResourceId();
    }
}
```

```
request.withLimit(<limit>);
request.withMarker("<marker>");
request.withId();
request.withName();
request.withEnterpriseProjectId();
request.withCloudConnectionId();
try {
    ListBandwidthPackagesResponse response = client.listBandwidthPackages(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ListBandwidthPackagesRequest()
        request.status =
        request.billing_mode =
        request.resource_id =
        request.limit = <limit>
        request.marker = "<marker>"
        request.id =
        request.name =
        request.enterprise_project_id =
        request.cloud_connection_id =
        response = client.list_bandwidth_packages(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListBandwidthPackagesRequest{}
    limitRequest:= int32(<limit>)
    request.Limit = &limitRequest
    markerRequest:= "<marker>"
    request.Marker = &markerRequest
    response, err := client.ListBandwidthPackages(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The bandwidth package list has been queried.

Error Codes

See [Error Codes](#).

4.3.3 Querying a Bandwidth Package

Function

This API is used to query the details of a bandwidth package.

Calling Method

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

URI

GET /v3/{domain_id}/ccaas/bandwidth-packages/{id}

Table 4-89 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36

Request Parameters

Table 4-90 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: **200**

Table 4-91 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
bandwidth_package	BandwidthPackage object	Bandwidth package.

Table 4-92 BandwidthPackage

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
enterprise_project_id	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
project_id	String	Project ID.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
resource_id	String	ID of the resource that the bandwidth package is bound to. Minimum: 0 Maximum: 36
resource_type	String	Type of the resource that the bandwidth package is bound to. cloud_connection : a cloud connection Minimum: 0 Maximum: 32

Parameter	Type	Description
local_area_id	String	<p>Geographic region.</p> <p>Cloud Connect is available in the following geographic regions:</p> <ul style="list-style-type: none"> • Chinese-Mainland Chinese mainland • Asia-Pacific Asia Pacific • Africa Southern Africa • Western-Latin-America Western Latin America • Eastern-Latin-America Eastern Latin America • Northern-Latin-America Northern Latin America
remote_area_id	String	<p>Geographic region.</p> <p>Cloud Connect is available in the following geographic regions:</p> <ul style="list-style-type: none"> • Chinese-Mainland Chinese mainland • Asia-Pacific Asia Pacific • Africa Southern Africa • Western-Latin-America Western Latin America • Eastern-Latin-America Eastern Latin America • Northern-Latin-America Northern Latin America

Parameter	Type	Description
spec_code	String	<p>Specification code of the bandwidth package.</p> <ul style="list-style-type: none"> ● bandwidth.aftoela: Southern Africa-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.aftonla: Southern Africa-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.aftowla: Southern Africa-Western Latin America on both the Chinese Mainland website and International website ● bandwidth.aptoaf: Asia Pacific-Southern Africa on the International website ● bandwidth.aptoap: Asia Pacific on the International website ● bandwidth.aptoela: Asia Pacific-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.aptonla: Asia Pacific-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.aptowla: Asia Pacific-Western Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtoaf: Chinese mainland-Southern Africa on the International website ● bandwidth.cmtoap: Chinese mainland-Asia Pacific on the International website ● bandwidth.cmtocm: Chinese mainland on the International website ● bandwidth.cmtoela: Chinese mainland-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtonla: Chinese mainland-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtowla: Chinese mainland-Western Latin America on both the Chinese Mainland website and International website ● bandwidth.elatoela: Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.elatonla: Eastern Latin America-Northern Latin America on both the Chinese Mainland website and International website

Parameter	Type	Description
		<ul style="list-style-type: none"> • bandwidth.wlatoela: Western Latin America-Eastern Latin America on both the Chinese Mainland website and International website • bandwidth.wlatonla: Western Latin America-Northern Latin America on both the Chinese Mainland website and International website • bandwidth.wlatowla: Western Latin America on both the Chinese Mainland website and International website <p>Minimum: 0 Maximum: 32</p>
billing_mode	Integer	<p>Billing mode of the bandwidth package on the Chinese Mainland website or the International website.</p> <ul style="list-style-type: none"> • 1: yearly/monthly on the Chinese Mainland website • 2: yearly/monthly on the International website • 3: pay-per-use on the Chinese Mainland website • 4: pay-per-use on the International website • 5: 95th percentile bandwidth billing on the Chinese Mainland website • 6: 95th percentile bandwidth billing on the International website
tags	Array of Tag objects	<p>Resource tags.</p> <p>Array Length: 1 - 20</p>
status	String	<p>Status of the bandwidth package.</p> <p>ACTIVE: The bandwidth package is available.</p> <p>Minimum: 0 Maximum: 36</p>
admin_state_up	Boolean	<p>Administrative status of the bandwidth package.</p>
order_id	String	<p>Order ID of the bandwidth package.</p> <p>Minimum: 0 Maximum: 32</p>
product_id	String	<p>Product ID of the bandwidth package.</p> <p>Minimum: 0 Maximum: 36</p>

Parameter	Type	Description
charge_mode	String	Bandwidth billing option. The bandwidth is billed by fixed bandwidth. Minimum: 0 Maximum: 64
bandwidth	Integer	Bandwidth range specified for the bandwidth package. Minimum: 2 Maximum: 999999
interflow_mode	String	Bandwidth package applicability. <ul style="list-style-type: none"> • Area: geographic regions • Region: cloud regions Minimum: 0 Maximum: 32

Table 4-93 Tag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Example Requests

Querying the details of a bandwidth package

```
GET https://{cc_endpoint}/v3/{domain_id}/ccaas/bandwidth-packages/{id}
```

Example Responses

Status code: 200

The details of a bandwidth package have been queried.

```
{
  "bandwidth_package" : {
    "bandwidth" : 5,
    "status" : "ACTIVE",
    "id" : "XXXXX",
    "name" : "test_bwp_name",
    "description" : "",
    "domain_id" : "XXX",
```

```
"created_at" : "2023-09-20T08:37:15Z",
"updated_at" : "2023-09-20T08:37:15Z",
"project_id" : "XXX",
"resource_type" : "",
"resource_id" : "",
"local_area_id" : "Chinese-Mainland",
"remote_area_id" : "Chinese-Mainland",
"admin_state_up" : true,
"charge_mode" : "bandwidth",
"billing_mode" : "3",
"spec_code" : "bandwidth.cmtocm",
"order_id" : "",
"product_id" : "",
"enterprise_project_id" : "0",
"tags" : [],
"interflow_mode" : "Area"
},
"request_id" : "39421c95a1d4308d964180f5d51d2f3c"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class ShowBandwidthPackageSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowBandwidthPackageRequest request = new ShowBandwidthPackageRequest();
        try {
            ShowBandwidthPackageResponse response = client.showBandwidthPackage(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ShowBandwidthPackageRequest()
        response = client.show_bandwidth_package(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
```

```

cc.CcClientBuilder().
    WithRegion(region.ValueOf("<YOUR REGION>")).
    WithCredential(auth).
    Build()

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

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The details of a bandwidth package have been queried.

Error Codes

See [Error Codes](#).

4.3.4 Updating a Bandwidth Package

Function

This API is used to update a bandwidth package.

Calling Method

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

URI

PUT /v3/{domain_id}/ccaas/bandwidth-packages/{id}

Table 4-94 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Parameter	Mandatory	Type	Description
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36

Request Parameters

Table 4-95 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-96 Request body parameters

Parameter	Mandatory	Type	Description
bandwidth_package	Yes	UpdateBandwidthPackage object	Request body for updating a bandwidth package.

Table 4-97 UpdateBandwidthPackage

Parameter	Mandatory	Type	Description
name	No	String	Resource name.
description	No	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
bandwidth	No	Integer	Bandwidth in the bandwidth package. Minimum: 2 Maximum: 999999

Parameter	Mandatory	Type	Description
billing_mode	No	Integer	Billing mode of the bandwidth package on the Chinese Mainland website or the International website. <ul style="list-style-type: none">• 5: 95th percentile bandwidth billing on the Chinese Mainland website• 6: 95th percentile bandwidth billing on the International website

Response Parameters

Status code: 200

Table 4-98 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
bandwidth_package	BandwidthPackage object	Bandwidth package.

Table 4-99 BandwidthPackage

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
enterprise_project_id	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36

Parameter	Type	Description
project_id	String	Project ID.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
resource_id	String	ID of the resource that the bandwidth package is bound to. Minimum: 0 Maximum: 36
resource_type	String	Type of the resource that the bandwidth package is bound to. cloud_connection : a cloud connection Minimum: 0 Maximum: 32
local_area_id	String	Geographic region. Cloud Connect is available in the following geographic regions: <ul style="list-style-type: none"> • Chinese-Mainland Chinese mainland • Asia-Pacific Asia Pacific • Africa Southern Africa • Western-Latin-America Western Latin America • Eastern-Latin-America Eastern Latin America • Northern-Latin-America Northern Latin America
remote_area_id	String	Geographic region. Cloud Connect is available in the following geographic regions: <ul style="list-style-type: none"> • Chinese-Mainland Chinese mainland • Asia-Pacific Asia Pacific • Africa Southern Africa • Western-Latin-America Western Latin America • Eastern-Latin-America Eastern Latin America • Northern-Latin-America Northern Latin America

Parameter	Type	Description
spec_code	String	<p>Specification code of the bandwidth package.</p> <ul style="list-style-type: none"> ● bandwidth.aftoela: Southern Africa-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.aftonla: Southern Africa-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.aftowla: Southern Africa-Western Latin America on both the Chinese Mainland website and International website ● bandwidth.aptoaf: Asia Pacific-Southern Africa on the International website ● bandwidth.aptoap: Asia Pacific on the International website ● bandwidth.aptoela: Asia Pacific-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.aptonla: Asia Pacific-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.aptowla: Asia Pacific-Western Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtoaf: Chinese mainland-Southern Africa on the International website ● bandwidth.cmtoap: Chinese mainland-Asia Pacific on the International website ● bandwidth.cmtocm: Chinese mainland on the International website ● bandwidth.cmtoela: Chinese mainland-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtonla: Chinese mainland-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtowla: Chinese mainland-Western Latin America on both the Chinese Mainland website and International website ● bandwidth.elatoela: Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.elatonla: Eastern Latin America-Northern Latin America on both the Chinese Mainland website and International website

Parameter	Type	Description
		<ul style="list-style-type: none"> • bandwidth.wlatoela: Western Latin America-Eastern Latin America on both the Chinese Mainland website and International website • bandwidth.wlatonla: Western Latin America-Northern Latin America on both the Chinese Mainland website and International website • bandwidth.wlatowla: Western Latin America on both the Chinese Mainland website and International website <p>Minimum: 0 Maximum: 32</p>
billing_mode	Integer	<p>Billing mode of the bandwidth package on the Chinese Mainland website or the International website.</p> <ul style="list-style-type: none"> • 1: yearly/monthly on the Chinese Mainland website • 2: yearly/monthly on the International website • 3: pay-per-use on the Chinese Mainland website • 4: pay-per-use on the International website • 5: 95th percentile bandwidth billing on the Chinese Mainland website • 6: 95th percentile bandwidth billing on the International website
tags	Array of Tag objects	<p>Resource tags.</p> <p>Array Length: 1 - 20</p>
status	String	<p>Status of the bandwidth package.</p> <p>ACTIVE: The bandwidth package is available.</p> <p>Minimum: 0 Maximum: 36</p>
admin_state_up	Boolean	<p>Administrative status of the bandwidth package.</p>
order_id	String	<p>Order ID of the bandwidth package.</p> <p>Minimum: 0 Maximum: 32</p>
product_id	String	<p>Product ID of the bandwidth package.</p> <p>Minimum: 0 Maximum: 36</p>

Parameter	Type	Description
charge_mode	String	Bandwidth billing option. The bandwidth is billed by fixed bandwidth. Minimum: 0 Maximum: 64
bandwidth	Integer	Bandwidth range specified for the bandwidth package. Minimum: 2 Maximum: 999999
interflow_mode	String	Bandwidth package applicability. <ul style="list-style-type: none"> • Area: geographic regions • Region: cloud regions Minimum: 0 Maximum: 32

Table 4-100 Tag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Example Requests

Changing the bandwidth of a bandwidth package

```
PUT https://{cc_endpoint}/v3/{domain_id}/ccaas/bandwidth-packages/{id}
```

```
{
  "bandwidth_package": {
    "bandwidth": 10
  }
}
```

Example Responses

Status code: 200

The bandwidth package has been updated.

```
{
  "request_id": "d58cc011274d4702642f71318e3e488c",
}
```



```
"bandwidth_package" : {
  "bandwidth" : 10,
  "status" : "ACTIVE",
  "id" : "XXXXX",
  "name" : "test_bw_name",
  "description" : "",
  "domain_id" : "XXX",
  "created_at" : "2023-09-20T08:37:15Z",
  "updated_at" : "2023-09-20T09:20:15Z",
  "project_id" : "XXX",
  "resource_type" : "",
  "resource_id" : "",
  "local_area_id" : "Chinese-Mainland",
  "remote_area_id" : "Chinese-Mainland",
  "admin_state_up" : true,
  "charge_mode" : "bandwidth",
  "billing_mode" : "5",
  "spec_code" : "bandwidth.cmtocm",
  "order_id" : "",
  "product_id" : "",
  "enterprise_project_id" : "0",
  "tags" : [],
  "interflow_mode" : "Area"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Changing the bandwidth of a bandwidth package

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class UpdateBandwidthPackageSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdateBandwidthPackageRequest request = new UpdateBandwidthPackageRequest();
        UpdateBandwidthPackageRequestBody body = new UpdateBandwidthPackageRequestBody();
```

```
UpdateBandwidthPackage bandwidthPackagebody = new UpdateBandwidthPackage();
bandwidthPackagebody.withBandwidth(10);
body.withBandwidthPackage(bandwidthPackagebody);
request.withBody(body);
try {
    UpdateBandwidthPackageResponse response = client.updateBandwidthPackage(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

Changing the bandwidth of a bandwidth package

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = UpdateBandwidthPackageRequest()
        bandwidthPackagebody = UpdateBandwidthPackage(
            bandwidth=10
        )
        request.body = UpdateBandwidthPackageRequestBody(
            bandwidth_package=bandwidthPackagebody
        )
        response = client.update_bandwidth_package(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

Changing the bandwidth of a bandwidth package

```

package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateBandwidthPackageRequest{}
    bandwidthBandwidthPackage:= int32(10)
    bandwidthPackagebody := &model.UpdateBandwidthPackage{
        Bandwidth: &bandwidthBandwidthPackage,
    }
    request.Body = &model.UpdateBandwidthPackageRequestBody{
        BandwidthPackage: bandwidthPackagebody,
    }
    response, err := client.UpdateBandwidthPackage(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The bandwidth package has been updated.

Error Codes

See [Error Codes](#).

4.3.5 Deleting a Bandwidth Package

Function

This API is used to delete a bandwidth package.

Calling Method

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

URI

DELETE /v3/{domain_id}/ccaas/bandwidth-packages/{id}

Table 4-101 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36

Request Parameters

Table 4-102 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

None

Example Requests

Deleting a bandwidth package

DELETE https://{cc_endpoint}/v3/{domain_id}/ccaas/bandwidth-packages/{id}

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class DeleteBandwidthPackageSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteBandwidthPackageRequest request = new DeleteBandwidthPackageRequest();
        try {
            DeleteBandwidthPackageResponse response = client.deleteBandwidthPackage(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = DeleteBandwidthPackageRequest()
        response = client.delete_bandwidth_package(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	The bandwidth package has been deleted.

Error Codes

See [Error Codes](#).

4.3.6 Adding a Tag to a Bandwidth Package

Function

This API is used to add a tag to a bandwidth package.

Calling Method

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

URI

POST /v3/{domain_id}/ccaas/bandwidth-packages/{id}/tag

Table 4-103 Path Parameters

Parameter	Mandatory	Type	Description
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Request Parameters

Table 4-104 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-105 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of Tag objects	Tags. Array Length: 1 - 20

Table 4-106 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	No	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Response Parameters

Status code: 204

Table 4-107 Response header parameters

Parameter	Type	Description
x-request-id	-	-

Example Requests

Adding a tag to a bandwidth package

```
POST /v3/{domain_id}/ccaas/bandwidth-packages/{id}/tag
{
  "tags" : [ {
    "key" : "key",
    "value" : "value"
  } ]
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Adding a tag to a bandwidth package

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class TagBandwidthPackageSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        TagBandwidthPackageRequest request = new TagBandwidthPackageRequest();
        TagBandwidthPackageRequestBody body = new TagBandwidthPackageRequestBody();
        List<Tag> listbodyTags = new ArrayList<>();
        listbodyTags.add(
            new Tag()
                .withKey("key")
                .withValue("value")
        );
    }
}
```

```
body.withTags(listbodyTags);
request.withBody(body);
try {
    TagBandwidthPackageResponse response = client.tagBandwidthPackage(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

Adding a tag to a bandwidth package

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = TagBandwidthPackageRequest()
        listTagsbody = [
            Tag(
                key="key",
                value="value"
            )
        ]
        request.body = TagBandwidthPackageRequestBody(
            tags=listTagsbody
        )
        response = client.tag_bandwidth_package(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

Adding a tag to a bandwidth package

```

package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.TagBandwidthPackageRequest{}
    valueTags:= "value"
    var listTagsbody = []model.Tag{
        {
            Key: "key",
            Value: &valueTags,
        },
    }
    request.Body = &model.TagBandwidthPackageRequestBody{
        Tags: listTagsbody,
    }
    response, err := client.TagBandwidthPackage(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	The bandwidth package tag added.

Error Codes

See [Error Codes](#).

4.3.7 Deleting a Tag from a Bandwidth Package

Function

This API is used to delete a tag from a bandwidth package.

Calling Method

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

URI

POST /v3/{domain_id}/ccaas/bandwidth-packages/{id}/untag

Table 4-108 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36

Request Parameters

Table 4-109 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-110 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of Tag objects	Tags. Array Length: 1 - 20

Table 4-111 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	No	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Response Parameters

Status code: 204

Table 4-112 Response header parameters

Parameter	Type	Description
x-request-id	-	-

Example Requests

Deleting a tag from a bandwidth package

```
POST /v3/{domain_id}/ccaas/bandwidth-packages/{id}/untag
{
  "tags": [ {
    "key": "key",
    "value": "value"
  } ]
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Deleting a tag from a bandwidth package

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

```
import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class UntagBandwidthPackageSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

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

        UntagBandwidthPackageRequest request = new UntagBandwidthPackageRequest();
        UntagBandwidthPackageRequestBody body = new UntagBandwidthPackageRequestBody();
        List<Tag> listbodyTags = new ArrayList<>();
        listbodyTags.add(
            new Tag()
                .withKey("key")
                .withValue("value")
        );
        body.withTags(listbodyTags);
        request.withBody(body);
        try {
            UntagBandwidthPackageResponse response = client.untagBandwidthPackage(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

Deleting a tag from a bandwidth package

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = UntagBandwidthPackageRequest()
        listTagsbody = [
            Tag(
                key="key",
                value="value"
            )
        ]
        request.body = UntagBandwidthPackageRequestBody(
            tags=listTagsbody
        )
        response = client.untag_bandwidth_package(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

Deleting a tag from a bandwidth package

```
package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())
```

```

request := &model.UntagBandwidthPackageRequest{}
valueTags:= "value"
var listTagsbody = []model.Tag{
    {
        Key: "key",
        Value: &valueTags,
    },
}
request.Body = &model.UntagBandwidthPackageRequestBody{
    Tags: listTagsbody,
}
response, err := client.UntagBandwidthPackage(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	The tag has been deleted from the bandwidth package.

Error Codes

See [Error Codes](#).

4.3.8 Querying the Tags of a Bandwidth Package

Function

This API is used to query the tags of a bandwidth package.

Calling Method

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

URI

GET /v3/{domain_id}/ccaas/bandwidth-packages/tags

Table 4-113 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Request Parameters

Table 4-114 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: **200**

Table 4-115 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
tags	Array of MultivaluedTag objects	All tags of a bandwidth package. Array Length: 1 - 200

Table 4-116 MultivaluedTag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
values	Array of strings	List of values with the same key. Array Length: 1 - 20

Example Requests

Querying the tags of a bandwidth package

```
GET /v3/{domain_id}/ccaas/bandwidth-packages/tags
```

Example Responses

Status code: 200

The tags of a bandwidth package have been queried.

```
{
  "request_id" : "762f22e24aec86c3d61d8db870e87ead",
  "tags" : [ {
    "key" : "key1",
    "values" : [ "value1" ]
  }, {
    "key" : "key2",
    "values" : [ "value2" ]
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class ListBandwidthPackageTagsSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ListBandwidthPackageTagsRequest request = new ListBandwidthPackageTagsRequest();
        try {
            ListBandwidthPackageTagsResponse response = client.listBandwidthPackageTags(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ListBandwidthPackageTagsRequest()
        response = client.list_bandwidth_package_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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
```

```

WithAk(ak).
WithSk(sk).
Build()

client := cc.NewCcClient(
    cc.CcClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

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

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The tags of a bandwidth package have been queried.

Error Codes

See [Error Codes](#).

4.3.9 Querying Bandwidth Packages by Tag

Function

Querying Bandwidth Packages by Tag

Calling Method

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

URI

POST /v3/{domain_id}/ccaas/bandwidth-packages/filter

Table 4-117 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Request Parameters

Table 4-118 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-119 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of MultivaluedTag objects	Tags. Array Length: 1 - 20

Table 4-120 MultivaluedTag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
values	Yes	Array of strings	List of values with the same key. Array Length: 1 - 20

Response Parameters

Status code: **200**

Table 4-121 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
page_info	PageInfo object	Pagination query information.
bandwidth_packages	Array of BandwidthPackage objects	Bandwidth package list. Array Length: 0 - 2000

Table 4-122 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier. Minimum: 1 Maximum: 4096
previous_marker	String	Forward pagination identifier. Minimum: 1 Maximum: 4096
current_count	Integer	Number of the resources in the current list. Minimum: 0 Maximum: 2000

Table 4-123 BandwidthPackage

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.

Parameter	Type	Description
enterprise_project_id	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
project_id	String	Project ID.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
resource_id	String	ID of the resource that the bandwidth package is bound to. Minimum: 0 Maximum: 36
resource_type	String	Type of the resource that the bandwidth package is bound to. cloud_connection : a cloud connection Minimum: 0 Maximum: 32
local_area_id	String	Geographic region. Cloud Connect is available in the following geographic regions: <ul style="list-style-type: none">• Chinese-Mainland Chinese mainland • Asia-Pacific Asia Pacific • Africa Southern Africa • Western-Latin-America Western Latin America • Eastern-Latin-America Eastern Latin America • Northern-Latin-America Northern Latin America

Parameter	Type	Description
remote_area_id	String	<p>Geographic region.</p> <p>Cloud Connect is available in the following geographic regions:</p> <ul style="list-style-type: none"> • Chinese-Mainland Chinese mainland • Asia-Pacific Asia Pacific • Africa Southern Africa • Western-Latin-America Western Latin America • Eastern-Latin-America Eastern Latin America • Northern-Latin-America Northern Latin America

Parameter	Type	Description
spec_code	String	<p>Specification code of the bandwidth package.</p> <ul style="list-style-type: none"> ● bandwidth.aftoela: Southern Africa-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.aftonla: Southern Africa-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.aftowla: Southern Africa-Western Latin America on both the Chinese Mainland website and International website ● bandwidth.aptoaf: Asia Pacific-Southern Africa on the International website ● bandwidth.aptoap: Asia Pacific on the International website ● bandwidth.aptoela: Asia Pacific-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.aptonla: Asia Pacific-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.aptowla: Asia Pacific-Western Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtoaf: Chinese mainland-Southern Africa on the International website ● bandwidth.cmtoap: Chinese mainland-Asia Pacific on the International website ● bandwidth.cmtocm: Chinese mainland on the International website ● bandwidth.cmtoela: Chinese mainland-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtonla: Chinese mainland-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtowla: Chinese mainland-Western Latin America on both the Chinese Mainland website and International website ● bandwidth.elatoela: Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.elatonla: Eastern Latin America-Northern Latin America on both the Chinese Mainland website and International website

Parameter	Type	Description
		<ul style="list-style-type: none"> • bandwidth.wlatoela: Western Latin America-Eastern Latin America on both the Chinese Mainland website and International website • bandwidth.wlatonla: Western Latin America-Northern Latin America on both the Chinese Mainland website and International website • bandwidth.wlatowla: Western Latin America on both the Chinese Mainland website and International website <p>Minimum: 0 Maximum: 32</p>
billing_mode	Integer	<p>Billing mode of the bandwidth package on the Chinese Mainland website or the International website.</p> <ul style="list-style-type: none"> • 1: yearly/monthly on the Chinese Mainland website • 2: yearly/monthly on the International website • 3: pay-per-use on the Chinese Mainland website • 4: pay-per-use on the International website • 5: 95th percentile bandwidth billing on the Chinese Mainland website • 6: 95th percentile bandwidth billing on the International website
tags	Array of Tag objects	<p>Resource tags.</p> <p>Array Length: 1 - 20</p>
status	String	<p>Status of the bandwidth package.</p> <p>ACTIVE: The bandwidth package is available.</p> <p>Minimum: 0 Maximum: 36</p>
admin_state_up	Boolean	<p>Administrative status of the bandwidth package.</p>
order_id	String	<p>Order ID of the bandwidth package.</p> <p>Minimum: 0 Maximum: 32</p>
product_id	String	<p>Product ID of the bandwidth package.</p> <p>Minimum: 0 Maximum: 36</p>

Parameter	Type	Description
charge_mode	String	Bandwidth billing option. The bandwidth is billed by fixed bandwidth. Minimum: 0 Maximum: 64
bandwidth	Integer	Bandwidth range specified for the bandwidth package. Minimum: 2 Maximum: 999999
interflow_mode	String	Bandwidth package applicability. <ul style="list-style-type: none"> • Area: geographic regions • Region: cloud regions Minimum: 0 Maximum: 32

Table 4-124 Tag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Example Requests

Querying bandwidth packages by tag

```
POST https://{cc_endpoint}/v3/{domain_id}/ccaas/bandwidth-packages/filter
{
  "tags": [ {
    "key": "key",
    "values": [ "value" ]
  } ]
}
```

Example Responses

Status code: 200

Bandwidth packages are queried by tag.

```
{
  "request_id": "61126320a1802d5c6444f9d2d76526c2",
```

```
"bandwidth_packages": [ {
  "bandwidth": 5,
  "status": "ACTIVE",
  "id": "XXXXX",
  "name": "test_bwp_name",
  "description": "",
  "domain_id": "XXX",
  "created_at": "2023-09-20T08:37:15Z",
  "updated_at": "2023-09-20T08:37:15Z",
  "project_id": "XXX",
  "resource_type": "",
  "resource_id": "",
  "local_area_id": "Chinese-Mainland",
  "remote_area_id": "Chinese-Mainland",
  "admin_state_up": true,
  "charge_mode": "bandwidth",
  "billing_mode": "3",
  "spec_code": "bandwidth.cmtocm",
  "order_id": "",
  "product_id": "",
  "enterprise_project_id": "0",
  "tags": [ {
    "key": "key1",
    "value": "value1"
  }, {
    "key": "key2",
    "value": "value2"
  } ],
  "interflow_mode": "Area"
} ],
"page_info": {
  "next_marker": "XXX",
  "previous_marker": "XXX",
  "current_count": 1
}
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Querying bandwidth packages by tag

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListBandwidthPackagesByTagsSolution {

    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");

ICredential auth = new GlobalCredentials()
    .withAk(ak)
    .withSk(sk);

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

ListBandwidthPackagesByTagsRequest request = new ListBandwidthPackagesByTagsRequest();
ListBandwidthPackagesByTagsRequestBody body = new ListBandwidthPackagesByTagsRequestBody();
List<String> listTagsValues = new ArrayList<>();
listTagsValues.add("value");
List<MultivaluedTag> listbodyTags = new ArrayList<>();
listbodyTags.add(
    new MultivaluedTag()
        .withKey("key")
        .withValues(listTagsValues)
);
body.withTags(listbodyTags);
request.withBody(body);
try {
    ListBandwidthPackagesByTagsResponse response = client.listBandwidthPackagesByTags(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

Querying bandwidth packages by tag

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ListBandwidthPackagesByTagsRequest()
```

```
listValuesTags = [
    "value"
]
listTagsbody = [
    MultivaluedTag(
        key="key",
        values=listValuesTags
    )
]
request.body = ListBandwidthPackagesByTagsRequestBody(
    tags=listTagsbody
)
response = client.list_bandwidth_packages_by_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

Querying bandwidth packages by tag

```
package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListBandwidthPackagesByTagsRequest{}
    var listValuesTags = []string{
        "value",
    }
    var listTagsbody = []model.MultivaluedTag{
        {
            Key: "key",
            Values: listValuesTags,
        },
    }
    request.Body = &model.ListBandwidthPackagesByTagsRequestBody{
        Tags: listTagsbody,
    }
    response, err := client.ListBandwidthPackagesByTags(request)
    if err == nil {
```

```

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

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Bandwidth packages are queried by tag.

Error Codes

See [Error Codes](#).

4.3.10 Binding a Bandwidth Package to a Cloud Connection

Function

This API is used to bind a bandwidth package to a cloud connection.

Calling Method

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

URI

POST /v3/{domain_id}/ccaas/bandwidth-packages/{id}/associate

Table 4-125 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36

Request Parameters

Table 4-126 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-127 Request body parameters

Parameter	Mandatory	Type	Description
bandwidth_package	Yes	AssociateBandwidthPackage object	Details of the resource that the bandwidth package is bound to.

Table 4-128 AssociateBandwidthPackage

Parameter	Mandatory	Type	Description
resource_id	Yes	String	ID of the resource that the bandwidth package is bound to. Minimum: 0 Maximum: 36
resource_type	Yes	String	Type of the resource that the bandwidth package is bound to. cloud_connection : a cloud connection Minimum: 0 Maximum: 32

Response Parameters

Status code: 201

Table 4-129 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
bandwidth_package	BandwidthPackage object	Bandwidth package.

Table 4-130 BandwidthPackage

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
enterprise_project_id	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
project_id	String	Project ID.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
resource_id	String	ID of the resource that the bandwidth package is bound to. Minimum: 0 Maximum: 36
resource_type	String	Type of the resource that the bandwidth package is bound to. cloud_connection : a cloud connection Minimum: 0 Maximum: 32

Parameter	Type	Description
local_area_id	String	<p>Geographic region.</p> <p>Cloud Connect is available in the following geographic regions:</p> <ul style="list-style-type: none"> • Chinese-Mainland Chinese mainland • Asia-Pacific Asia Pacific • Africa Southern Africa • Western-Latin-America Western Latin America • Eastern-Latin-America Eastern Latin America • Northern-Latin-America Northern Latin America
remote_area_id	String	<p>Geographic region.</p> <p>Cloud Connect is available in the following geographic regions:</p> <ul style="list-style-type: none"> • Chinese-Mainland Chinese mainland • Asia-Pacific Asia Pacific • Africa Southern Africa • Western-Latin-America Western Latin America • Eastern-Latin-America Eastern Latin America • Northern-Latin-America Northern Latin America

Parameter	Type	Description
spec_code	String	<p>Specification code of the bandwidth package.</p> <ul style="list-style-type: none"> ● bandwidth.aftoela: Southern Africa-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.aftonla: Southern Africa-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.aftowla: Southern Africa-Western Latin America on both the Chinese Mainland website and International website ● bandwidth.aptoaf: Asia Pacific-Southern Africa on the International website ● bandwidth.aptoap: Asia Pacific on the International website ● bandwidth.aptoela: Asia Pacific-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.aptonla: Asia Pacific-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.aptowla: Asia Pacific-Western Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtoaf: Chinese mainland-Southern Africa on the International website ● bandwidth.cmtoap: Chinese mainland-Asia Pacific on the International website ● bandwidth.cmtocm: Chinese mainland on the International website ● bandwidth.cmtoela: Chinese mainland-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtonla: Chinese mainland-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtowla: Chinese mainland-Western Latin America on both the Chinese Mainland website and International website ● bandwidth.elatoela: Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.elatonla: Eastern Latin America-Northern Latin America on both the Chinese Mainland website and International website

Parameter	Type	Description
		<ul style="list-style-type: none"> • bandwidth.wlatoela: Western Latin America-Eastern Latin America on both the Chinese Mainland website and International website • bandwidth.wlatonla: Western Latin America-Northern Latin America on both the Chinese Mainland website and International website • bandwidth.wlatowla: Western Latin America on both the Chinese Mainland website and International website <p>Minimum: 0 Maximum: 32</p>
billing_mode	Integer	<p>Billing mode of the bandwidth package on the Chinese Mainland website or the International website.</p> <ul style="list-style-type: none"> • 1: yearly/monthly on the Chinese Mainland website • 2: yearly/monthly on the International website • 3: pay-per-use on the Chinese Mainland website • 4: pay-per-use on the International website • 5: 95th percentile bandwidth billing on the Chinese Mainland website • 6: 95th percentile bandwidth billing on the International website
tags	Array of Tag objects	<p>Resource tags.</p> <p>Array Length: 1 - 20</p>
status	String	<p>Status of the bandwidth package.</p> <p>ACTIVE: The bandwidth package is available.</p> <p>Minimum: 0 Maximum: 36</p>
admin_state_up	Boolean	<p>Administrative status of the bandwidth package.</p>
order_id	String	<p>Order ID of the bandwidth package.</p> <p>Minimum: 0 Maximum: 32</p>
product_id	String	<p>Product ID of the bandwidth package.</p> <p>Minimum: 0 Maximum: 36</p>

Parameter	Type	Description
charge_mode	String	Bandwidth billing option. The bandwidth is billed by fixed bandwidth. Minimum: 0 Maximum: 64
bandwidth	Integer	Bandwidth range specified for the bandwidth package. Minimum: 2 Maximum: 999999
interflow_mode	String	Bandwidth package applicability. <ul style="list-style-type: none"> • Area: geographic regions • Region: cloud regions Minimum: 0 Maximum: 32

Table 4-131 Tag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Example Requests

Binding a bandwidth package to a cloud connection

```
POST https://{cc_endpoint}/v3/{domain_id}/ccaas/bandwidth-packages/{id}/associate
{
  "bandwidth_package": {
    "resource_id": "XXX",
    "resource_type": "cloud_connection"
  }
}
```

Example Responses

Status code: 201

The bandwidth package has been bound to the cloud connection.

```
{
  "bandwidth_package": {
```

```
"bandwidth" : 5,
"status" : "ACTIVE",
"id" : "XXXXX",
"name" : "test_bwp_name",
"description" : "",
"domain_id" : "XXX",
"created_at" : "2023-09-20T08:37:15Z",
"updated_at" : "2023-09-20T08:37:15Z",
"project_id" : "XXX",
"resource_type" : "cloud_connection",
"resource_id" : "XXX",
"local_area_id" : "Chinese-Mainland",
"remote_area_id" : "Chinese-Mainland",
"admin_state_up" : true,
"charge_mode" : "bandwidth",
"billing_mode" : "5",
"spec_code" : "bandwidth.cmtocm",
"order_id" : "",
"product_id" : "",
"enterprise_project_id" : "0",
"tags" : [ ],
"interflow_mode" : "Area"
},
"request_id" : "39421c95a1d4308d964180f5d51d2f3c"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Binding a bandwidth package to a cloud connection

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class AssociateBandwidthPackageSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        AssociateBandwidthPackageRequest request = new AssociateBandwidthPackageRequest();
        AssociateBandwidthPackageRequestBody body = new AssociateBandwidthPackageRequestBody();
```

```
AssociateBandwidthPackage bandwidthPackagebody = new AssociateBandwidthPackage();
bandwidthPackagebody.withResourceType(AssociateBandwidthPackage.ResourceTypeEnum.fromValue("cloud_connection"))
    .withResourceid("XXX");
body.withBandwidthPackage(bandwidthPackagebody);
request.withBody(body);
try {
    AssociateBandwidthPackageResponse response = client.associateBandwidthPackage(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

Binding a bandwidth package to a cloud connection

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = AssociateBandwidthPackageRequest()
        bandwidthPackagebody = AssociateBandwidthPackage(
            resource_type="cloud_connection",
            resource_id="XXX"
        )
        request.body = AssociateBandwidthPackageRequestBody(
            bandwidth_package=bandwidthPackagebody
        )
        response = client.associate_bandwidth_package(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

Binding a bandwidth package to a cloud connection

```
package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.AssociateBandwidthPackageRequest{}
    bandwidthPackagebody := &model.AssociateBandwidthPackage{
        ResourceType: model.GetAssociateBandwidthPackageResourceTypeEnum().CLOUD_CONNECTION,
        ResourceId: "XXX",
    }
    request.Body = &model.AssociateBandwidthPackageRequestBody{
        BandwidthPackage: bandwidthPackagebody,
    }
    response, err := client.AssociateBandwidthPackage(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
201	The bandwidth package has been bound to the cloud connection.

Error Codes

See [Error Codes](#).

4.3.11 Unbinding a Bandwidth Package from a Cloud Connection

Function

This API is used to unbind a bandwidth package from a cloud connection.

Calling Method

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

URI

POST /v3/{domain_id}/ccaas/bandwidth-packages/{id}/disassociate

Table 4-132 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36

Request Parameters

Table 4-133 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-134 Request body parameters

Parameter	Mandatory	Type	Description
bandwidth_package	Yes	DisassociateBandwidthPackage object	Details of the bandwidth package to be unbound.

Table 4-135 DisassociateBandwidthPackage

Parameter	Mandatory	Type	Description
resource_id	Yes	String	ID of the resource that the bandwidth package is bound to. Minimum: 0 Maximum: 36
resource_type	Yes	String	Type of the resource that the bandwidth package is bound to. cloud_connection : a cloud connection Minimum: 0 Maximum: 32

Response Parameters

Status code: 201

Table 4-136 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
bandwidth_package	BandwidthPackage object	Bandwidth package.

Table 4-137 BandwidthPackage

Parameter	Type	Description
id	String	Resource ID.

Parameter	Type	Description
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
enterprise_project_id	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
project_id	String	Project ID.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
resource_id	String	ID of the resource that the bandwidth package is bound to. Minimum: 0 Maximum: 36
resource_type	String	Type of the resource that the bandwidth package is bound to. cloud_connection : a cloud connection Minimum: 0 Maximum: 32
local_area_id	String	Geographic region. Cloud Connect is available in the following geographic regions: <ul style="list-style-type: none"> • Chinese-Mainland Chinese mainland • Asia-Pacific Asia Pacific • Africa Southern Africa • Western-Latin-America Western Latin America • Eastern-Latin-America Eastern Latin America • Northern-Latin-America Northern Latin America

Parameter	Type	Description
remote_area_id	String	<p>Geographic region.</p> <p>Cloud Connect is available in the following geographic regions:</p> <ul style="list-style-type: none"> • Chinese-Mainland Chinese mainland • Asia-Pacific Asia Pacific • Africa Southern Africa • Western-Latin-America Western Latin America • Eastern-Latin-America Eastern Latin America • Northern-Latin-America Northern Latin America

Parameter	Type	Description
spec_code	String	<p>Specification code of the bandwidth package.</p> <ul style="list-style-type: none"> ● bandwidth.aftoela: Southern Africa-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.aftonla: Southern Africa-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.aftowla: Southern Africa-Western Latin America on both the Chinese Mainland website and International website ● bandwidth.aptoaf: Asia Pacific-Southern Africa on the International website ● bandwidth.aptoap: Asia Pacific on the International website ● bandwidth.aptoela: Asia Pacific-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.aptonla: Asia Pacific-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.aptowla: Asia Pacific-Western Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtoaf: Chinese mainland-Southern Africa on the International website ● bandwidth.cmtoap: Chinese mainland-Asia Pacific on the International website ● bandwidth.cmtocm: Chinese mainland on the International website ● bandwidth.cmtoela: Chinese mainland-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtonla: Chinese mainland-Northern Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtowla: Chinese mainland-Western Latin America on both the Chinese Mainland website and International website ● bandwidth.elatoela: Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.elatonla: Eastern Latin America-Northern Latin America on both the Chinese Mainland website and International website

Parameter	Type	Description
		<ul style="list-style-type: none"> • bandwidth.wlatoela: Western Latin America-Eastern Latin America on both the Chinese Mainland website and International website • bandwidth.wlatonla: Western Latin America-Northern Latin America on both the Chinese Mainland website and International website • bandwidth.wlatowla: Western Latin America on both the Chinese Mainland website and International website <p>Minimum: 0 Maximum: 32</p>
billing_mode	Integer	<p>Billing mode of the bandwidth package on the Chinese Mainland website or the International website.</p> <ul style="list-style-type: none"> • 1: yearly/monthly on the Chinese Mainland website • 2: yearly/monthly on the International website • 3: pay-per-use on the Chinese Mainland website • 4: pay-per-use on the International website • 5: 95th percentile bandwidth billing on the Chinese Mainland website • 6: 95th percentile bandwidth billing on the International website
tags	Array of Tag objects	<p>Resource tags.</p> <p>Array Length: 1 - 20</p>
status	String	<p>Status of the bandwidth package.</p> <p>ACTIVE: The bandwidth package is available.</p> <p>Minimum: 0 Maximum: 36</p>
admin_state_up	Boolean	<p>Administrative status of the bandwidth package.</p>
order_id	String	<p>Order ID of the bandwidth package.</p> <p>Minimum: 0 Maximum: 32</p>
product_id	String	<p>Product ID of the bandwidth package.</p> <p>Minimum: 0 Maximum: 36</p>

Parameter	Type	Description
charge_mode	String	Bandwidth billing option. The bandwidth is billed by fixed bandwidth. Minimum: 0 Maximum: 64
bandwidth	Integer	Bandwidth range specified for the bandwidth package. Minimum: 2 Maximum: 999999
interflow_mode	String	Bandwidth package applicability. <ul style="list-style-type: none"> • Area: geographic regions • Region: cloud regions Minimum: 0 Maximum: 32

Table 4-138 Tag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Example Requests

Unbinding a bandwidth package from a cloud connection

```
POST https://{cc_endpoint}/v3/{domain_id}/ccaas/bandwidth-packages/{id}/disassociate
{
  "bandwidth_package": {
    "resource_id": "XXX",
    "resource_type": "cloud_connection"
  }
}
```

Example Responses

Status code: 201

The bandwidth package has been unbound from the cloud connection.

```
{
  "bandwidth_package": {
```

```
"bandwidth" : 5,
"status" : "ACTIVE",
"id" : "XXXXX",
"name" : "test_bwp_name",
"description" : "",
"domain_id" : "XXX",
"created_at" : "2023-09-20T08:37:15Z",
"updated_at" : "2023-09-20T08:37:15Z",
"project_id" : "XXX",
"resource_type" : "",
"resource_id" : "",
"local_area_id" : "Chinese-Mainland",
"remote_area_id" : "Chinese-Mainland",
"admin_state_up" : true,
"charge_mode" : "bandwidth",
"billing_mode" : "5",
"spec_code" : "bandwidth.cmtocm",
"order_id" : "",
"product_id" : "",
"enterprise_project_id" : "0",
"tags" : [ ],
"interflow_mode" : "Area"
},
"request_id" : "39421c95a1d4308d964180f5d51d2f3c"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Unbinding a bandwidth package from a cloud connection

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class DisassociateBandwidthPackageSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        DisassociateBandwidthPackageRequest request = new DisassociateBandwidthPackageRequest();
        DisassociateBandwidthPackageRequestBody body = new DisassociateBandwidthPackageRequestBody();
```



```
DisassociateBandwidthPackage bandwidthPackagebody = new DisassociateBandwidthPackage();
bandwidthPackagebody.withResourceType(DisassociateBandwidthPackage.ResourceTypeEnum.fromValue("cloud_connection"))
    .withResourceId("XXX");
body.withBandwidthPackage(bandwidthPackagebody);
request.withBody(body);
try {
    DisassociateBandwidthPackageResponse response = client.disassociateBandwidthPackage(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

Unbinding a bandwidth package from a cloud connection

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = DisassociateBandwidthPackageRequest()
        bandwidthPackagebody = DisassociateBandwidthPackage(
            resource_type="cloud_connection",
            resource_id="XXX"
        )
        request.body = DisassociateBandwidthPackageRequestBody(
            bandwidth_package=bandwidthPackagebody
        )
        response = client.disassociate_bandwidth_package(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

Unbinding a bandwidth package from a cloud connection

```
package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DisassociateBandwidthPackageRequest{}
    bandwidthPackagebody := &model.DisassociateBandwidthPackage{
        ResourceType: model.GetDisassociateBandwidthPackageResourceTypeEnum().CLOUD_CONNECTION,
        ResourceId: "XXX",
    }
    request.Body = &model.DisassociateBandwidthPackageRequestBody{
        BandwidthPackage: bandwidthPackagebody,
    }
    response, err := client.DisassociateBandwidthPackage(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
201	The bandwidth package has been unbound from the cloud connection.

Error Codes

See [Error Codes](#).

4.4 Inter-Region Bandwidths

4.4.1 Assigning an Inter-Region Bandwidth

Function

This API is used to assign an inter-region bandwidth.

Calling Method

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

URI

POST /v3/{domain_id}/ccaas/inter-region-bandwidths

Table 4-139 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Request Parameters

Table 4-140 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-141 Request body parameters

Parameter	Mandatory	Type	Description
inter_region_bandwidth	Yes	CreateInterRegionBandwidth object	Details of the inter-region bandwidth to be assigned.

Table 4-142 CreateInterRegionBandwidth

Parameter	Mandatory	Type	Description
cloud_connect ion_id	Yes	String	Resource ID.
bandwidth_pa ckage_id	Yes	String	Resource ID.
bandwidth	Yes	Integer	Inter-region bandwidth. Minimum: 1 Maximum: 999999
inter_region_i ds	Yes	Array of strings	IDs of regions where the inter- region bandwidth is used for communications. Minimum: 0 Maximum: 36 Array Length: 2 - 2

Response Parameters

Status code: 201

Table 4-143 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
inter_region_b andwidth	InterRegionB andwidth object	Inter-region bandwidth.

Table 4-144 InterRegionBandwidth

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255

Parameter	Type	Description
domain_id	String	ID of the account that the instance belongs to.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
cloud_connect ion_id	String	Resource ID.
bandwidth_pa ckage_id	String	Resource ID.
inter_regions	Array of InterRegion objects	Inter-region bandwidth details. Array Length: 2 - 2
bandwidth	Integer	Range of an inter-region bandwidth. Minimum: 1 Maximum: 999999

Table 4-145 InterRegion

Parameter	Type	Description
id	String	Resource ID.
project_id	String	Project ID.
local_region_i d	String	ID of one region where an inter-region bandwidth is used. Minimum: 0 Maximum: 36
remote_regio n_id	String	ID of another region where an inter-region bandwidth is used. Minimum: 0 Maximum: 36

Example Requests

Assigning an inter-region bandwidth with both region IDs specified

```
POST https://{cc_endpoint}/v3/{domain_id}/ccaas/inter-region-bandwidths
```

```
{
  "inter_region_bandwidth" : {
    "bandwidth" : "5",
```

```
"cloud_connection_id" : "XXX",
"inter_region_ids" : [ "region_a", "region_b" ],
"bandwidth_package_id" : "XXX"
}
}
```

Example Responses

Status code: 201

The inter-region bandwidth has been assigned.

```
{
  "inter_region_bandwidth" : {
    "id" : "XXX",
    "name" : "",
    "description" : "",
    "domain_id" : "XXX",
    "created_at" : "2023-09-20T11:41:53Z",
    "updated_at" : "2023-09-20T11:41:53Z",
    "bandwidth_package_id" : "XXX",
    "cloud_connection_id" : "XXX",
    "bandwidth" : 5,
    "inter_regions" : [ {
      "id" : "XXX",
      "project_id" : "",
      "local_region_id" : "region_a",
      "remote_region_id" : "region_b"
    }, {
      "id" : "XXX",
      "project_id" : "",
      "local_region_id" : "region_b",
      "remote_region_id" : "region_a"
    } ]
  },
  "request_id" : "fd403735e22a5213845afbf69425a976"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Assigning an inter-region bandwidth with both region IDs specified

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateInterRegionBandwidthSolution {

    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");

ICredential auth = new GlobalCredentials()
    .withAk(ak)
    .withSk(sk);

CcClient client = CcClient.newBuilder()
    .withCredential(auth)
    .withRegion(CcRegion.valueOf("<YOUR REGION>"))
    .build();
CreateInterRegionBandwidthRequest request = new CreateInterRegionBandwidthRequest();
CreateInterRegionBandwidthRequestBody body = new CreateInterRegionBandwidthRequestBody();
List<String> listInterRegionBandwidthInterRegionIds = new ArrayList<>();
listInterRegionBandwidthInterRegionIds.add("region_a");
listInterRegionBandwidthInterRegionIds.add("region_b");
CreateInterRegionBandwidth interRegionBandwidthbody = new CreateInterRegionBandwidth();
interRegionBandwidthbody.withBandwidth(5)
    .withBandwidthPackageId("XXX")
    .withInterRegionIds(listInterRegionBandwidthInterRegionIds)
    .withCloudConnectionId("XXX");
body.withInterRegionBandwidth(interRegionBandwidthbody);
request.withBody(body);
try {
    CreateInterRegionBandwidthResponse response = client.createInterRegionBandwidth(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

Assigning an inter-region bandwidth with both region IDs specified

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

```
try:
    request = CreateInterRegionBandwidthRequest()
    listInterRegionIdsInterRegionBandwidth = [
        "region_a",
        "region_b"
    ]
    interRegionBandwidthbody = CreateInterRegionBandwidth(
        bandwidth=5,
        bandwidth_package_id="XXX",
        inter_region_ids=listInterRegionIdsInterRegionBandwidth,
        cloud_connection_id="XXX"
    )
    request.body = CreateInterRegionBandwidthRequestBody(
        inter_region_bandwidth=interRegionBandwidthbody
    )
    response = client.create_inter_region_bandwidth(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

Assigning an inter-region bandwidth with both region IDs specified

```
package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateInterRegionBandwidthRequest{}
    var listInterRegionIdsInterRegionBandwidth = []string{
        "region_a",
        "region_b",
    }
    interRegionBandwidthbody := &model.CreateInterRegionBandwidth{
        Bandwidth: int32(5),
        BandwidthPackageId: "XXX",
        InterRegionIds: listInterRegionIdsInterRegionBandwidth,
        CloudConnectionId: "XXX",
    }
    request.Body = &model.CreateInterRegionBandwidthRequestBody{
```



```

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

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
201	The inter-region bandwidth has been assigned.

Error Codes

See [Error Codes](#).

4.4.2 Querying the Inter-Region Bandwidth List

Function

This API is used to query the inter-region bandwidth list.

Parameters **marker** and **limit** are used for pagination query. The two parameters take effect only when they are used together.

Calling Method

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

URI

GET /v3/{domain_id}/ccaas/inter-region-bandwidths

Table 4-146 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Table 4-147 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 1000 Minimum: 1 Maximum: 1000 Default: 1000
marker	No	String	Pagination query information. You can obtain the marker values from the response of the last API call. You can enter the marker value of the previous page or the next page. If you enter the marker value of the previous page, the previous page will be queried. If you enter the marker value of the next page, the next page will be queried. During pagination query, the query criteria, including the filters, sorting criteria, and the limit value, cannot be modified. Minimum: 1 Maximum: 4096
id	No	Array	Resource ID. Multiple IDs can be queried. Array Length: 1 - 20
enterprise_project_id	No	Array	Enterprise project IDs. Array Length: 1 - 20
cloud_connection_id	No	Array	Cloud connection IDs. Array Length: 1 - 20
bandwidth_package_id	No	Array	Bandwidth package list used to query inter-region bandwidths. Array Length: 1 - 10

Request Parameters

Table 4-148 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 200

Table 4-149 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
page_info	PageInfo object	Pagination query information.
inter_region_bandwidths	Array of InterRegionBandwidth objects	Inter-region bandwidth list. Array Length: 0 - 2000

Table 4-150 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier. Minimum: 1 Maximum: 4096
previous_marker	String	Forward pagination identifier. Minimum: 1 Maximum: 4096
current_count	Integer	Number of the resources in the current list. Minimum: 0 Maximum: 2000

Table 4-151 InterRegionBandwidth

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
cloud_connect ion_id	String	Resource ID.
bandwidth_pa ckage_id	String	Resource ID.
inter_regions	Array of InterRegion objects	Inter-region bandwidth details. Array Length: 2 - 2
bandwidth	Integer	Range of an inter-region bandwidth. Minimum: 1 Maximum: 999999

Table 4-152 InterRegion

Parameter	Type	Description
id	String	Resource ID.
project_id	String	Project ID.
local_region_i d	String	ID of one region where an inter-region bandwidth is used. Minimum: 0 Maximum: 36
remote_regio n_id	String	ID of another region where an inter-region bandwidth is used. Minimum: 0 Maximum: 36

Example Requests

Querying the inter-region bandwidth list

```
GET https://{cc_endpoint}/v3/{domain_id}/ccaas/inter-region-bandwidths
```

Example Responses

Status code: 200

The inter-region bandwidth list has been queried.

```
{
  "request_id": "fd403735e22a5213845afbf69425a976",
  "inter_region_bandwidths": [ {
    "id": "XXX",
    "name": "",
    "description": "",
    "domain_id": "XXX",
    "created_at": "2023-09-20T11:41:53Z",
    "updated_at": "2023-09-20T11:41:53Z",
    "bandwidth_package_id": "XXX",
    "cloud_connection_id": "XXX",
    "bandwidth": 5,
    "inter_regions": [ {
      "id": "XXX",
      "project_id": "",
      "local_region_id": "region_a",
      "remote_region_id": "region_b"
    }, {
      "id": "XXX",
      "project_id": "",
      "local_region_id": "region_b",
      "remote_region_id": "region_a"
    } ]
  } ],
  "page_info": {
    "previous_marker": "XXX",
    "current_count": 1
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListInterRegionBandwidthsSolution {
```

```
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");

    ICredential auth = new GlobalCredentials()
        .withAk(ak)
        .withSk(sk);

    CcClient client = CcClient.newBuilder()
        .withCredential(auth)
        .withRegion(CcRegion.valueOf("<YOUR REGION>"))
        .build();
    ListInterRegionBandwidthsRequest request = new ListInterRegionBandwidthsRequest();
    request.withBandwidthPackageId();
    request.withLimit(<limit>);
    request.withMarker("<marker>");
    request.withId();
    request.withEnterpriseProjectId();
    request.withCloudConnectionId();
    try {
        ListInterRegionBandwidthsResponse response = client.listInterRegionBandwidths(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ListInterRegionBandwidthsRequest()
```

```
request.bandwidth_package_id =
request.limit = <limit>
request.marker = "<marker>"
request.id =
request.enterprise_project_id =
request.cloud_connection_id =
response = client.list_inter_region_bandwidths(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListInterRegionBandwidthsRequest{}
    limitRequest:= int32(<limit>)
    request.Limit = &limitRequest
    markerRequest:= "<marker>"
    request.Marker = &markerRequest
    response, err := client.ListInterRegionBandwidths(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The inter-region bandwidth list has been queried.

Error Codes

See [Error Codes](#).

4.4.3 Querying an Inter-Region Bandwidth

Function

This API is used to query the details of an inter-region bandwidth.

Calling Method

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

URI

GET /v3/{domain_id}/ccaas/inter-region-bandwidths/{id}

Table 4-153 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36

Request Parameters

Table 4-154 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 200

Table 4-155 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
inter_region_bandwidth	InterRegionBandwidth object	Inter-region bandwidth.

Table 4-156 InterRegionBandwidth

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
cloud_connection_id	String	Resource ID.
bandwidth_package_id	String	Resource ID.
inter_regions	Array of InterRegion objects	Inter-region bandwidth details. Array Length: 2 - 2
bandwidth	Integer	Range of an inter-region bandwidth. Minimum: 1 Maximum: 999999

Table 4-157 InterRegion

Parameter	Type	Description
id	String	Resource ID.
project_id	String	Project ID.
local_region_id	String	ID of one region where an inter-region bandwidth is used. Minimum: 0 Maximum: 36
remote_region_id	String	ID of another region where an inter-region bandwidth is used. Minimum: 0 Maximum: 36

Example Requests

Querying the details of an inter-region bandwidth

```
GET https://{cc_endpoint}/v3/{domain_id}/ccaas/inter-region-bandwidths/id
```

Example Responses

Status code: 200

The details of an inter-region bandwidth have been queried.

```
{
  "request_id": "fd403735e22a5213845afbf69425a976",
  "inter_region_bandwidth": {
    "id": "XXX",
    "name": "",
    "description": "",
    "domain_id": "XXX",
    "created_at": "2023-09-20T11:41:53Z",
    "updated_at": "2023-09-20T11:41:53Z",
    "bandwidth_package_id": "XXX",
    "cloud_connection_id": "XXX",
    "bandwidth": 5,
    "inter_regions": [ {
      "id": "XXX",
      "project_id": "",
      "local_region_id": "region_a",
      "remote_region_id": "region_b"
    }, {
      "id": "XXX",
      "project_id": "",
      "local_region_id": "region_b",
      "remote_region_id": "region_a"
    } ]
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class ShowInterRegionBandwidthSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowInterRegionBandwidthRequest request = new ShowInterRegionBandwidthRequest();
        try {
            ShowInterRegionBandwidthResponse response = client.showInterRegionBandwidth(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")
```

```
credentials = GlobalCredentials(ak, sk) \

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

try:
    request = ShowInterRegionBandwidthRequest()
    response = client.show_inter_region_bandwidth(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The details of an inter-region bandwidth have been queried.

Error Codes

See [Error Codes](#).

4.4.4 Modifying an Inter-Region Bandwidth

Function

This API is used to modify an inter-region bandwidth.

Calling Method

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

URI

PUT /v3/{domain_id}/ccaas/inter-region-bandwidths/{id}

Table 4-158 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36

Request Parameters

Table 4-159 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-160 Request body parameters

Parameter	Mandatory	Type	Description
inter_region_bandwidth	Yes	UpdateInterRegionBandwidth object	Details of the inter-region bandwidth to be updated.

Table 4-161 UpdateInterRegionBandwidth

Parameter	Mandatory	Type	Description
bandwidth	Yes	Integer	Inter-region bandwidth. Minimum: 1 Maximum: 999999

Response Parameters

Status code: 200

Table 4-162 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
inter_region_bandwidth	InterRegionBandwidth object	Inter-region bandwidth.

Table 4-163 InterRegionBandwidth

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.

Parameter	Type	Description
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
cloud_connection_id	String	Resource ID.
bandwidth_package_id	String	Resource ID.
inter_regions	Array of InterRegion objects	Inter-region bandwidth details. Array Length: 2 - 2
bandwidth	Integer	Range of an inter-region bandwidth. Minimum: 1 Maximum: 999999

Table 4-164 InterRegion

Parameter	Type	Description
id	String	Resource ID.
project_id	String	Project ID.
local_region_id	String	ID of one region where an inter-region bandwidth is used. Minimum: 0 Maximum: 36
remote_region_id	String	ID of another region where an inter-region bandwidth is used. Minimum: 0 Maximum: 36

Example Requests

Modifying an inter-region bandwidth

```
PUT https://{cc_endpoint}/v3/{domain_id}/ccaas/inter-region-bandwidths/{id}
{
  "inter_region_bandwidth" : {
    "bandwidth" : "10"
  }
}
```

Example Responses

Status code: 200

The inter-region bandwidth has been updated.

```
{
  "request_id": "fd403735e22a5213845afbf69425a976",
  "inter_region_bandwidth": {
    "id": "XXX",
    "name": "",
    "description": "",
    "domain_id": "XXX",
    "created_at": "2023-09-20T11:41:53Z",
    "updated_at": "2023-09-20T11:45:53Z",
    "bandwidth_package_id": "XXX",
    "cloud_connection_id": "XXX",
    "bandwidth": 10,
    "inter_regions": [ {
      "id": "XXX",
      "project_id": "",
      "local_region_id": "region_a",
      "remote_region_id": "region_b"
    }, {
      "id": "XXX",
      "project_id": "",
      "local_region_id": "region_b",
      "remote_region_id": "region_a"
    } ]
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Modifying an inter-region bandwidth

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class UpdateInterRegionBandwidthSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);
```



```
CcClient client = CcClient.newBuilder()
    .withCredential(auth)
    .withRegion(CcRegion.valueOf("<YOUR REGION>"))
    .build();
UpdateInterRegionBandwidthRequest request = new UpdateInterRegionBandwidthRequest();
UpdateInterRegionBandwidthRequestBody body = new UpdateInterRegionBandwidthRequestBody();
UpdateInterRegionBandwidth interRegionBandwidthbody = new UpdateInterRegionBandwidth();
interRegionBandwidthbody.withBandwidth(10);
body.withInterRegionBandwidth(interRegionBandwidthbody);
request.withBody(body);
try {
    UpdateInterRegionBandwidthResponse response = client.updateInterRegionBandwidth(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

Modifying an inter-region bandwidth

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = UpdateInterRegionBandwidthRequest()
        interRegionBandwidthbody = UpdateInterRegionBandwidth(
            bandwidth=10
        )
        request.body = UpdateInterRegionBandwidthRequestBody(
            inter_region_bandwidth=interRegionBandwidthbody
        )
        response = client.update_inter_region_bandwidth(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

Modifying an inter-region bandwidth

```
package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateInterRegionBandwidthRequest{}
    interRegionBandwidthbody := &model.UpdateInterRegionBandwidth{
        Bandwidth: int32(10),
    }
    request.Body = &model.UpdateInterRegionBandwidthRequestBody{
        InterRegionBandwidth: interRegionBandwidthbody,
    }
    response, err := client.UpdateInterRegionBandwidth(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The inter-region bandwidth has been updated.

Error Codes

See [Error Codes](#).

4.4.5 Deleting an Inter-Region Bandwidth

Function

This API is used to delete an inter-region bandwidth.

Calling Method

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

URI

DELETE /v3/{domain_id}/ccaas/inter-region-bandwidths/{id}

Table 4-165 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36

Request Parameters

Table 4-166 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

None

Example Requests

Deleting an inter-region bandwidth

```
DELETE https://{cc_endpoint}/v3/{domain_id}/ccaas/inter-region-bandwidths/{id}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class DeleteInterRegionBandwidthSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteInterRegionBandwidthRequest request = new DeleteInterRegionBandwidthRequest();
        try {
            DeleteInterRegionBandwidthResponse response = client.deleteInterRegionBandwidth(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
```

```
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = DeleteInterRegionBandwidthRequest()
        response = client.delete_inter_region_bandwidth(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

```
}  
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	The inter-region bandwidth has been deleted.

Error Codes

See [Error Codes](#).

4.5 Cloud Connection Routes

4.5.1 Querying the List of Cloud Connection Routes

Function

This API is used to query the list of cloud connection routes.

Parameters **marker** and **limit** are used for pagination query. The two parameters take effect only when they are used together.

Calling Method

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

URI

GET /v3/{domain_id}/ccaas/cloud-connection-routes

Table 4-167 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Table 4-168 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 1000 Minimum: 1 Maximum: 1000 Default: 1000
marker	No	String	Pagination query information. You can obtain the marker values from the response of the last API call. You can enter the marker value of the previous page or the next page. If you enter the marker value of the previous page, the previous page will be queried. If you enter the marker value of the next page, the next page will be queried. During pagination query, the query criteria, including the filters, sorting criteria, and the limit value, cannot be modified. Minimum: 1 Maximum: 4096
cloud_connection_id	No	Array	Cloud connection IDs. Array Length: 1 - 20
instance_id	No	Array	Network instance ID used to query the list of cloud connection routes. Array Length: 1 - 10
region_id	No	String	Region ID used to query the list of cloud connection routes. Minimum: 0 Maximum: 36
id	No	String	IDs used for queries. Minimum: 0 Maximum: 36

Request Parameters

Table 4-169 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 200

Table 4-170 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
page_info	PageInfo object	Pagination query information.
cloud_connection_routes	Array of CloudConnectionRoute objects	List of cloud connection routes. Array Length: 0 - 2000

Table 4-171 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier. Minimum: 1 Maximum: 4096
previous_marker	String	Forward pagination identifier. Minimum: 1 Maximum: 4096
current_count	Integer	Number of the resources in the current list. Minimum: 0 Maximum: 2000

Table 4-172 CloudConnectionRoute

Parameter	Type	Description
id	String	Resource ID.
cloud_connection_id	String	Resource ID.
domain_id	String	ID of the account that the instance belongs to.
instance_id	String	Resource ID.
project_id	String	Project ID.
region_id	String	Region ID.
type	String	Type of the network instance that the next hop of a route points to. <ul style="list-style-type: none"> • VPC: a VPC • VGW: a virtual gateway Minimum: 2 Maximum: 3
destination	String	Destination address. Minimum: 0 Maximum: 36

Example Requests

Querying the list of cloud connection routes

```
GET https://{cc_endpoint}/v3/{domain_id}/ccaas/cloud-connection-routes
```

Example Responses

Status code: 200

The list of cloud connection routes has been queried.

```
{
  "request_id": "844d75196c487081d2a32187ea9d3757",
  "cloud_connection_routes": [ {
    "id": "XXX",
    "cloud_connection_id": "XXX",
    "domain_id": "XXX",
    "project_id": "XXX",
    "instance_id": "XXX",
    "type": "vpc",
    "region_id": "cn-north-4",
    "destination": "192.168.1.0/24"
  } ],
  "page_info": {
    "previous_marker": "XXX",
    "current_count": 1
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListCloudConnectionRoutesSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ListCloudConnectionRoutesRequest request = new ListCloudConnectionRoutesRequest();
        request.withInstanceId();
        request.withRegionId("<region_id>");
        request.withId("<id>");
        request.withLimit("<limit>");
        request.withMarker("<marker>");
        request.withCloudConnectionId();
        try {
            ListCloudConnectionRoutesResponse response = client.listCloudConnectionRoutes(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
```

```
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ListCloudConnectionRoutesRequest()
        request.instance_id =
        request.region_id = "<region_id>"
        request.id = "<id>"
        request.limit = <limit>
        request.marker = "<marker>"
        request.cloud_connection_id =
        response = client.list_cloud_connection_routes(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListCloudConnectionRoutesRequest{}
```

```
regionIdRequest:= "<region_id>"
request.RegionId = &regionIdRequest
idRequest:= "<id>"
request.Id = &idRequest
limitRequest:= int32(<limit>)
request.Limit = &limitRequest
markerRequest:= "<marker>"
request.Marker = &markerRequest
response, err := client.ListCloudConnectionRoutes(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The list of cloud connection routes has been queried.

Error Codes

See [Error Codes](#).

4.5.2 Querying a Cloud Connection Route

Function

This API is used to query the details of a cloud connection route.

Parameters **marker** and **limit** are used for pagination query. The two parameters take effect only when they are used together.

Calling Method

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

URI

GET /v3/{domain_id}/ccaas/cloud-connection-routes/{id}

Table 4-173 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36

Request Parameters

Table 4-174 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 200

Table 4-175 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
cloud_connect ion_route	CloudConnec tionRoute object	Cloud connection route.

Table 4-176 CloudConnectionRoute

Parameter	Type	Description
id	String	Resource ID.
cloud_connect ion_id	String	Resource ID.

Parameter	Type	Description
domain_id	String	ID of the account that the instance belongs to.
instance_id	String	Resource ID.
project_id	String	Project ID.
region_id	String	Region ID.
type	String	Type of the network instance that the next hop of a route points to. <ul style="list-style-type: none">• VPC: a VPC• VGW: a virtual gateway Minimum: 2 Maximum: 3
destination	String	Destination address. Minimum: 0 Maximum: 36

Example Requests

Querying the details of a cloud connection route

```
GET https://{cc_endpoint}/v3/{domain_id}/ccaas/cloud-connection-routes/{id}
```

Example Responses

Status code: 200

The details of a cloud connection route have been queried.

```
{
  "request_id" : "844d75196c487081d2a32187ea9d3757",
  "cloud_connection_route" : {
    "id" : "XXX",
    "cloud_connection_id" : "XXX",
    "domain_id" : "XXX",
    "project_id" : "XXX",
    "instance_id" : "XXX",
    "type" : "vpc",
    "region_id" : "cn-north-4",
    "destination" : "192.168.1.0/24"
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

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

```
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class ShowCloudConnectionRoutesSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowCloudConnectionRoutesRequest request = new ShowCloudConnectionRoutesRequest();
        try {
            ShowCloudConnectionRoutesResponse response = client.showCloudConnectionRoutes(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

```

        .build()

    try:
        request = ShowCloudConnectionRoutesRequest()
        response = client.show_cloud_connection_routes(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The details of a cloud connection route have been queried.

Error Codes

See [Error Codes](#).

4.6 Authorizations

4.6.1 Creating an Authorization

Function

This API is used to grant another account permissions to load your network instances to their cloud connection.

Calling Method

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

URI

POST /v3/{domain_id}/ccaas/authorisations

Table 4-177 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Request Parameters

Table 4-178 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-179 Request body parameters

Parameter	Mandatory	Type	Description
authorisation	Yes	CreateAuthorisation object	Details of the authorization to be created.

Table 4-180 CreateAuthorisation

Parameter	Mandatory	Type	Description
name	No	String	Resource name.
description	No	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
instance_id	Yes	String	Resource ID.
project_id	Yes	String	Project ID.
region_id	Yes	String	Region ID.
cloud_connect ion_id	Yes	String	Resource ID.
instance_type	Yes	String	Type of an authorized network instance. vpc indicates VPCs. Minimum: 0 Maximum: 255
cloud_connect ion_domain_i d	Yes	String	Account ID of the network instance that another account allows you to use. Minimum: 0 Maximum: 36

Response Parameters

Status code: 201

Table 4-181 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
authorisation	Authorisatio n object	Authorization.

Table 4-182 Authorisation

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
instance_id	String	Resource ID.
project_id	String	Project ID.
region_id	String	Region ID.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
domain_id	String	ID of the account that the instance belongs to.
cloud_connection_id	String	Resource ID.
status	String	Authorization status. Minimum: 0 Maximum: 255
instance_type	String	Type of an authorized network instance. Minimum: 0 Maximum: 255
cloud_connection_domain_id	String	Account ID of the network instance that another account allows you to use. Minimum: 0 Maximum: 36

Example Requests

Allowing other users to load your network instances to their cloud connection

```
POST https://{cc_endpoint}/v3/{domain_id}/ccaas/authorisations
```

```
{
  "authorisation" : {
    "region_id" : "region_id",
    "instance_id" : "XXX",
    "instance_type" : "vpc",
```

```
"cloud_connection_domain_id" : "XXX",
"cloud_connection_id" : "XXX",
"project_id" : "XXX"
}
}
```

Example Responses

Status code: 201

The authorization has been created.

```
{
  "request_id" : "6a1865ef10104295db6e3b641284b3ed",
  "authorisation" : {
    "id" : "XXX",
    "name" : "",
    "description" : "",
    "domain_id" : "XXX",
    "created_at" : "2023-09-20T08:03:51Z",
    "updated_at" : "2022-09-20T08:03:51Z",
    "project_id" : "XXX",
    "region_id" : "region_id",
    "instance_type" : "vpc",
    "instance_id" : "XXX",
    "cloud_connection_domain_id" : "XXX",
    "cloud_connection_id" : "XXX",
    "status" : "authorized"
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Allowing other users to load your network instances to their cloud connection

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class CreateAuthorisationSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);
    }
}
```

```
CcClient client = CcClient.newBuilder()
    .withCredential(auth)
    .withRegion(CcRegion.valueOf("<YOUR REGION>"))
    .build();
CreateAuthorisationRequest request = new CreateAuthorisationRequest();
CreateAuthorisationRequestBody body = new CreateAuthorisationRequestBody();
CreateAuthorisation authorisationbody = new CreateAuthorisation();
authorisationbody.withInstanceId("XXX")
    .withCloudConnectionDomainId("XXX")
    .withProjectId("XXX")
    .withRegionId("region_id")
    .withInstanceType(CreateAuthorisation.InstanceTypeEnum.fromValue("vpc"))
    .withCloudConnectionId("XXX");
body.withAuthorisation(authorisationbody);
request.withBody(body);
try {
    CreateAuthorisationResponse response = client.createAuthorisation(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

Allowing other users to load your network instances to their cloud connection

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = CreateAuthorisationRequest()
        authorisationbody = CreateAuthorisation(
            instance_id="XXX",
            cloud_connection_domain_id="XXX",
            project_id="XXX",
            region_id="region_id",
            instance_type="vpc",
            cloud_connection_id="XXX"
        )
```

```
request.body = CreateAuthorisationRequestBody(
    authorisation=authorisationbody
)
response = client.create_authorisation(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

Allowing other users to load your network instances to their cloud connection

```
package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateAuthorisationRequest{}
    authorisationbody := &model.CreateAuthorisation{
        InstanceId: "XXX",
        CloudConnectionDomainId: "XXX",
        ProjectId: "XXX",
        RegionId: "region_id",
        InstanceType: model.GetCreateAuthorisationInstanceTypeEnum().VPC,
        CloudConnectionId: "XXX",
    }
    request.Body = &model.CreateAuthorisationRequestBody{
        Authorisation: authorisationbody,
    }
    response, err := client.CreateAuthorisation(request)
    if err == nil {
        fmt.Printf("%v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
201	The authorization has been created.

Error Codes

See [Error Codes](#).

4.6.2 Querying the Authorization List

Function

This API is used to query the list of authorizations that allow another account to use your network instances.

Parameters **marker** and **limit** are used for pagination query. The two parameters take effect only when they are used together.

Calling Method

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

URI

GET /v3/{domain_id}/ccaas/authorisations

Table 4-183 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Table 4-184 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 1000 Minimum: 1 Maximum: 1000 Default: 1000
marker	No	String	Pagination query information. You can obtain the marker values from the response of the last API call. You can enter the marker value of the previous page or the next page. If you enter the marker value of the previous page, the previous page will be queried. If you enter the marker value of the next page, the next page will be queried. During pagination query, the query criteria, including the filters, sorting criteria, and the limit value, cannot be modified. Minimum: 1 Maximum: 4096
id	No	Array	Resource ID. Multiple IDs can be queried. Array Length: 1 - 20
name	No	Array	Resource name. Multiple names can be queried. Array Length: 1 - 20
description	No	Array	Description. Multiple descriptions can be queried. Array Length: 1 - 20
cloud_connection_id	No	Array	Cloud connection IDs. Array Length: 1 - 20
instance_id	No	Array	Network instance ID used to query authorizations. Array Length: 1 - 10

Request Parameters

Table 4-185 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 200

Table 4-186 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
page_info	PageInfo object	Pagination query information.
authorisations	Array of Authorisation objects	List of the authorized instances. Array Length: 0 - 2000

Table 4-187 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier. Minimum: 1 Maximum: 4096
previous_marker	String	Forward pagination identifier. Minimum: 1 Maximum: 4096
current_count	Integer	Number of the resources in the current list. Minimum: 0 Maximum: 2000

Table 4-188 Authorisation

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
instance_id	String	Resource ID.
project_id	String	Project ID.
region_id	String	Region ID.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
domain_id	String	ID of the account that the instance belongs to.
cloud_connect ion_id	String	Resource ID.
status	String	Authorization status. Minimum: 0 Maximum: 255
instance_type	String	Type of an authorized network instance. Minimum: 0 Maximum: 255
cloud_connect ion_domain_i d	String	Account ID of the network instance that another account allows you to use. Minimum: 0 Maximum: 36

Example Requests

Querying the authorization list

```
GET https://{cc_endpoint}/v3/{domain_id}/ccaas/authorisations
```

Example Responses

Status code: 200

The authorization list has been queried.

```
{
  "request_id": "bce57c774ed47dd828963e5ec3a0b06d",
  "authorisations": [ {
    "id": "XXX",
    "name": "",
    "description": "",
    "domain_id": "XXX",
    "created_at": "2023-09-20T08:03:51Z",
    "updated_at": "2023-09-20T08:03:51Z",
    "project_id": "XXX",
    "region_id": "region_id",
    "instance_type": "vpc",
    "instance_id": "XXX",
    "cloud_connection_domain_id": "XXX",
    "cloud_connection_id": "XXX",
    "status": "authorized"
  } ],
  "page_info": {
    "previous_marker": "XXX",
    "current_count": 1
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListAuthorisationsSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ListAuthorisationsRequest request = new ListAuthorisationsRequest();
        request.withInstanceld();
        request.withLimit(<limit>);
        request.withMarker("<marker>");
    }
}
```

```
request.withId();
request.withName();
request.withDescription();
request.withCloudConnectionId();
try {
    ListAuthorisationsResponse response = client.listAuthorisations(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ListAuthorisationsRequest()
        request.instance_id =
        request.limit = <limit>
        request.marker = "<marker>"
        request.id =
        request.name =
        request.description =
        request.cloud_connection_id =
        response = client.list_authorisations(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/global"
cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListAuthorisationsRequest{}
    limitRequest:= int32(<limit>)
    request.Limit = &limitRequest
    markerRequest:= "<marker>"
    request.Marker = &markerRequest
    response, err := client.ListAuthorisations(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The authorization list has been queried.

Error Codes

See [Error Codes](#).

4.6.3 Querying the Permission List

Function

This API is used to query the list of permissions to use network instances in another account.

Parameters **marker** and **limit** are used for pagination query. The two parameters take effect only when they are used together.

Calling Method

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

URI

GET /v3/{domain_id}/ccaas/permissions

Table 4-189 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Table 4-190 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 1000 Minimum: 1 Maximum: 1000 Default: 1000
marker	No	String	Pagination query information. You can obtain the marker values from the response of the last API call. You can enter the marker value of the previous page or the next page. If you enter the marker value of the previous page, the previous page will be queried. If you enter the marker value of the next page, the next page will be queried. During pagination query, the query criteria, including the filters, sorting criteria, and the limit value, cannot be modified. Minimum: 1 Maximum: 4096

Parameter	Mandatory	Type	Description
id	No	Array	Resource ID. Multiple IDs can be queried. Array Length: 1 - 20
name	No	Array	Resource name. Multiple names can be queried. Array Length: 1 - 20
description	No	Array	Description. Multiple descriptions can be queried. Array Length: 1 - 20
cloud_connect ion_id	No	Array	Cloud connection IDs. Array Length: 1 - 20
instance_id	No	Array	Network instance ID used to query authorizations. Array Length: 1 - 10

Request Parameters

Table 4-191 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: **200**

Table 4-192 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
page_info	PageInfo object	Pagination query information.

Parameter	Type	Description
permissions	Array of Permission objects	List of the authorized instances. Array Length: 0 - 2000

Table 4-193 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier. Minimum: 1 Maximum: 4096
previous_marker	String	Forward pagination identifier. Minimum: 1 Maximum: 4096
current_count	Integer	Number of the resources in the current list. Minimum: 0 Maximum: 2000

Table 4-194 Permission

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
instance_id	String	Resource ID.
project_id	String	Project ID.
region_id	String	Region ID.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
domain_id	String	ID of the account that the instance belongs to.
cloud_connect ion_id	String	Resource ID.

Parameter	Type	Description
status	String	Authorization status. Minimum: 0 Maximum: 255
instance_type	String	Type of an authorized network instance. Minimum: 0 Maximum: 255
instance_domain_id	String	Account ID of the network instance that another account allows you to use. Minimum: 0 Maximum: 36

Example Requests

Querying the permission list

```
GET https://{cc_endpoint}/v3/{domain_id}/ccaas/permissions
```

Example Responses

Status code: 200

The permission list has been queried.

```
{
  "request_id": "bce57c774ed47dd828963e5ec3a0b06d",
  "permissions": [ {
    "id": "XXX",
    "name": "",
    "description": "",
    "domain_id": "XXX",
    "created_at": "2023-09-20T08:03:51Z",
    "project_id": "XXX",
    "region_id": "region_id",
    "instance_type": "vpc",
    "instance_id": "XXX",
    "instance_domain_id": "XXX",
    "cloud_connection_id": "XXX",
    "status": "authorized"
  } ],
  "page_info": {
    "previous_marker": "XXX",
    "current_count": 1
  }
}
```

Status Codes

Status Code	Description
200	The permission list has been queried.

Error Codes

See [Error Codes](#).

4.6.4 Updating an Authorization

Function

This API is used to update an authorization.

Calling Method

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

URI

PUT /v3/{domain_id}/ccaas/authorisations/{id}

Table 4-195 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36

Request Parameters

Table 4-196 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-197 Request body parameters

Parameter	Mandatory	Type	Description
authorisation	Yes	UpdateAutho risation object	Details of the authorization to be updated.

Table 4-198 UpdateAuthorisation

Parameter	Mandatory	Type	Description
name	No	String	Resource name.
description	No	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255

Response Parameters

Status code: 200

Table 4-199 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
authorisation	Authorisation object	Authorization.

Table 4-200 Authorisation

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
instance_id	String	Resource ID.
project_id	String	Project ID.
region_id	String	Region ID.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.

Parameter	Type	Description
domain_id	String	ID of the account that the instance belongs to.
cloud_connect ion_id	String	Resource ID.
status	String	Authorization status. Minimum: 0 Maximum: 255
instance_type	String	Type of an authorized network instance. Minimum: 0 Maximum: 255
cloud_connect ion_domain_i d	String	Account ID of the network instance that another account allows you to use. Minimum: 0 Maximum: 36

Example Requests

Updating the description of an authorization

PUT https://{cc_endpoint}/v3/{domain_id}/ccaas/authorisations/{id}

```
{
  "authorisation": {
    "description": "description"
  }
}
```

Example Responses

Status code: 200

The authorization has been updated.

```
{
  "request_id": "7ef7cd8fc2d5140da1cd59eb2dd25a57",
  "authorisation": {
    "id": "XXX",
    "name": "",
    "description": "description",
    "domain_id": "XXX",
    "created_at": "2023-09-20T08:03:51Z",
    "updated_at": "2023-09-20T08:13:51Z",
    "project_id": "XXX",
    "region_id": "region_id",
    "instance_type": "vpc",
    "instance_id": "XXX",
    "cloud_connection_domain_id": "XXX",
    "cloud_connection_id": "XXX",
    "status": "authorized"
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Updating the description of an authorization

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class UpdateAuthorisationSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdateAuthorisationRequest request = new UpdateAuthorisationRequest();
        UpdateAuthorisationRequestBody body = new UpdateAuthorisationRequestBody();
        UpdateAuthorisation authorisationbody = new UpdateAuthorisation();
        authorisationbody.withDescription("description");
        body.withAuthorisation(authorisationbody);
        request.withBody(body);
        try {
            UpdateAuthorisationResponse response = client.updateAuthorisation(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

Updating the description of an authorization

```
# coding: utf-8
```

```
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = UpdateAuthorisationRequest()
        authorisationbody = UpdateAuthorisation(
            description="description"
        )
        request.body = UpdateAuthorisationRequestBody(
            authorisation=authorisationbody
        )
        response = client.update_authorisation(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

Updating the description of an authorization

```
package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
```

```

Build()

request := &model.UpdateAuthorisationRequest{
descriptionAuthorisation:= "description"
authorisationbody := &model.UpdateAuthorisation{
    Description: &descriptionAuthorisation,
}
request.Body = &model.UpdateAuthorisationRequestBody{
    Authorisation: authorisationbody,
}
response, err := client.UpdateAuthorisation(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
    
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The authorization has been updated.

Error Codes

See [Error Codes](#).

4.6.5 Canceling an Authorization

Function

This API is used to cancel the authorization that allows other users to load your network instances to their cloud connection.

Calling Method

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

URI

DELETE /v3/{domain_id}/ccaas/authorisations/{id}

Table 4-201 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36

Request Parameters

Table 4-202 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

None

Example Requests

Canceling the authorization that allows other users to load your network instances to their cloud connection

```
DELETE https://{cc_endpoint}/v3/{domain_id}/ccaas/authorisations/{id}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
```



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

public class DeleteAuthorisationSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteAuthorisationRequest request = new DeleteAuthorisationRequest();
        try {
            DeleteAuthorisationResponse response = client.deleteAuthorisation(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = DeleteAuthorisationRequest()
        response = client.delete_authorisation(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	The authorization has been canceled.

Error Codes

See [Error Codes](#).

4.7 Central Networks

4.7.1 Creating a Central Network

Function

This API is used to create a central network.

Calling Method

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

URI

POST /v3/{domain_id}/gcn/central-networks

Table 4-203 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Request Parameters

Table 4-204 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-205 Request body parameters

Parameter	Mandatory	Type	Description
central_network	Yes	CreateCentralNetwork object	Central network.

Table 4-206 CreateCentralNetwork

Parameter	Mandatory	Type	Description
name	Yes	String	Resource name.
description	No	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
tags	No	Array of Tag objects	Resource tags. Array Length: 1 - 20
enterprise_project_id	No	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
policy_document	No	CentralNetworkPolicyDocument object	Central network policy document.

Table 4-207 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	No	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Table 4-208 CentralNetworkPolicyDocument

Parameter	Mandatory	Type	Description
default_plane	Yes	String	Name of the default central network plane. Default: default-plane Minimum: 1 Maximum: 64
planes	Yes	Array of CentralNetworkPlaneDocument objects	List of the central network planes. Array Length: 1 - 100
er_instances	No	Array of AssociateErInstanceDocument objects	List of the enterprise routers on the central network. Array Length: 1 - 200

Table 4-209 CentralNetworkPlaneDocument

Parameter	Mandatory	Type	Description
name	Yes	String	Resource name.
associate_er_tables	No	Array of AssociateErTableDocument objects	List of the enterprise routers on the central network. Array Length: 0 - 100
exclude_er_connections	No	Array of ExcludeErConnectionDocument objects	Whether to exclude the connections to enterprise routers on the central network. Array Length: 0 - 100

Table 4-210 AssociateErTableDocument

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
region_id	Yes	String	Region ID.
enterprise_router_id	Yes	String	Enterprise router ID.
enterprise_router_table_id	Yes	String	Resource ID.

Table 4-211 ExcludeErConnectionDocument

Parameter	Mandatory	Type	Description
[items]	No	Array of AssociateErInstanceDocument objects	Connections between enterprise routers managed by the central network plane.

Table 4-212 AssociateErInstanceDocument

Parameter	Mandatory	Type	Description
enterprise_router_id	Yes	String	Enterprise router ID.
project_id	Yes	String	Project ID.
region_id	Yes	String	Region ID.

Response Parameters

Status code: 202

Table 4-213 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
central_network	CentralNetwork object	Central network.

Table 4-214 CentralNetwork

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.

Parameter	Type	Description
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
domain_id	String	ID of the account that the instance belongs to.
state	String	Central network status. <ul style="list-style-type: none"> ● AVAILABLE: The central network is available. ● UPDATING: The central network is being updated. ● FAILED: The operation on the central network failed. ● CREATING: The central network is being created. ● DELETING: The central network is being deleted. ● DELETED: The central network is deleted.
enterprise_project_id	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
tags	Array of Tag objects	Resource tags. Array Length: 1 - 20
planes	Array of CentralNetworkPlane objects	List of central network planes. Array Length: 0 - 2000
er_instances	Array of CentralNetworkErInstance objects	List of enterprise routers on a central network. Array Length: 1 - 200
connections	Array of CentralNetworkConnectionInfo objects	List of the enterprise router connections on a central network. Array Length: 0 - 2000

Parameter	Type	Description
default_plane_id	String	Resource ID.

Table 4-215 Tag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Table 4-216 CentralNetworkPlane

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
associate_er_tables	Array of AssociateErTableDocument objects	List of the enterprise routers on the central network. Array Length: 0 - 100
exclude_er_connections	Array of ExcludeErConnectionDocument objects	Whether to exclude the connections to enterprise routers on the central network. Array Length: 0 - 100

Table 4-217 AssociateErTableDocument

Parameter	Type	Description
project_id	String	Project ID.
region_id	String	Region ID.
enterprise_router_id	String	Enterprise router ID.
enterprise_router_table_id	String	Resource ID.

Table 4-218 ExcludeErConnectionDocument

Parameter	Type	Description
[items]	Array of AssociateErInstanceDocument objects	Connections between enterprise routers managed by the central network plane.

Table 4-219 AssociateErInstanceDocument

Parameter	Type	Description
enterprise_router_id	String	Enterprise router ID.
project_id	String	Project ID.
region_id	String	Region ID.

Table 4-220 CentralNetworkErInstance

Parameter	Type	Description
id	String	Resource ID.
enterprise_router_id	String	Enterprise router ID.
project_id	String	Project ID.
region_id	String	Region ID.
asn	Long	ASN of the network instance when BGP is used for routing. Minimum: 0 Maximum: 4294967295
site_code	String	Site code definition.

Table 4-221 CentralNetworkConnectionInfo

Parameter	Type	Description
id	String	Resource ID.
plane_id	String	Resource ID.

Parameter	Type	Description
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Bandwidth range, in Mbit/s.
connection_type	String	Type of a central network connection. <ul style="list-style-type: none"> • ER-ER: connections between enterprise routers • ER-GDGW: connections between enterprise routers and global DC gateways • ER-ER_ROUTE_TABLE: connections between enterprise routers and route tables of other enterprise routers
connection_point_pair	Array of ConnectionPoint objects	Both ends of a central network connection. The length is fixed to an array of 2. Array Length: 2 - 2
state	String	Central network connection status. <ul style="list-style-type: none"> • AVAILABLE: The connection is available. • CREATING: The connection is being created. • UPDATING: The connection is being updated. • DELETING: The connection is being deleted. • FREEZING: The connection is being frozen. • UNFREEZING: The connection is being unfrozen. • RECOVERING: The connection is being recovered. • FAILED: The operation on the connection failed. • DELETED: The connection is deleted. • APPROVING: The connection is being approved. • APPROVED: The connection is approved. • UNAPPROVED: The approval failed.

Table 4-222 ConnectionPoint

Parameter	Type	Description
id	String	Resource ID.

Parameter	Type	Description
project_id	String	Project ID.
region_id	String	Region ID.
site_code	String	Site code definition.
instance_id	String	Resource ID.
type	String	Type of a central network connection point. <ul style="list-style-type: none">● ER: an enterprise router● GDGW: a global DC gateway● ER_ROUTE_TABLE: an enterprise router route table

Example Requests

Creating a central network

```
POST /v3/{domain_id}/gcn/central-networks
```

```
{
  "central_network" : {
    "name" : "name"
  }
}
```

Example Responses

Status code: 202

The central network has been created.

```
{
  "request_id" : "e9837622a6d4f31e4417b5432f42fafa",
  "central_network" : {
    "id" : "e096c86f-817c-418c-945c-6b1d8860a15d",
    "name" : "name",
    "created_at" : "2023-10-09T06:22:40.856Z",
    "updated_at" : "2023-10-09T06:22:40.856Z",
    "domain_id" : "XXX",
    "state" : "CREATING",
    "enterprise_project_id" : "0"
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Creating a central network

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

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

```
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class CreateCentralNetworkSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateCentralNetworkRequest request = new CreateCentralNetworkRequest();
        CreateCentralNetworkRequestBody body = new CreateCentralNetworkRequestBody();
        CreateCentralNetwork centralNetworkbody = new CreateCentralNetwork();
        centralNetworkbody.setName("name");
        body.withCentralNetwork(centralNetworkbody);
        request.withBody(body);
        try {
            CreateCentralNetworkResponse response = client.createCentralNetwork(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

Creating a central network

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
```

```
sk = __import__('os').getenv("CLOUD_SDK_SK")

credentials = GlobalCredentials(ak, sk) \

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

try:
    request = CreateCentralNetworkRequest()
    centralNetworkbody = CreateCentralNetwork(
        name="name"
    )
    request.body = CreateCentralNetworkRequestBody(
        central_network=centralNetworkbody
    )
    response = client.create_central_network(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

Creating a central network

```
package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateCentralNetworkRequest{}
    centralNetworkbody := &model.CreateCentralNetwork{
        Name: "name",
    }
    request.Body = &model.CreateCentralNetworkRequestBody{
        CentralNetwork: centralNetworkbody,
    }
    response, err := client.CreateCentralNetwork(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    }
}
```

```
} else {  
    fmt.Println(err)  
}  
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
202	The central network has been created.

Error Codes

See [Error Codes](#).

4.7.2 Querying the Central Network List

Function

This API is used to query the central network list.

Parameters **marker** and **limit** are used for pagination query. The default value of **limit** is **0**. If **marker** is not specified, the first data record is returned.

Calling Method

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

URI

GET /v3/{domain_id}/gcn/central-networks

Table 4-223 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Table 4-224 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 1000 Minimum: 1 Maximum: 1000 Default: 1000
marker	No	String	Pagination query information. You can obtain the marker values from the response of the last API call. You can enter the marker value of the previous page or the next page. If you enter the marker value of the previous page, the previous page will be queried. If you enter the marker value of the next page, the next page will be queried. During pagination query, the query criteria, including the filters, sorting criteria, and the limit value, cannot be modified. Minimum: 1 Maximum: 4096
sort_key	No	String	Field for sorting. Default: updated_at Minimum: 1 Maximum: 36
sort_dir	No	Object	Whether the resources are sorted in ascending or descending order. asc indicates the ascending order and desc indicates the descending order.
id	No	Array	Resource ID. Multiple IDs can be queried. Array Length: 1 - 20
name	No	Array	Resource name. Multiple names can be queried. Array Length: 1 - 20

Parameter	Mandatory	Type	Description
state	No	Array	Central network status. Multiple statuses can be queried. Array Length: 1 - 20
enterprise_project_id	No	Array	Enterprise project IDs. Array Length: 1 - 20
enterprise_router_id	No	Array	Enterprise router IDs. Array Length: 1 - 10
attachment_instance_id	No	Array	Attachment ID. Array Length: 1 - 10
global_connection_bandwidth_id	No	Array	Bandwidth package IDs. Array Length: 1 - 20
connection_id	No	Array	Connection ID. Array Length: 1 - 10

Request Parameters

Table 4-225 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 200

Table 4-226 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
page_info	PageInfo object	Pagination query information.

Parameter	Type	Description
central_networks	Array of CentralNetwork objects	Central network list. Array Length: 0 - 2000

Table 4-227 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier. Minimum: 1 Maximum: 4096
previous_marker	String	Forward pagination identifier. Minimum: 1 Maximum: 4096
current_count	Integer	Number of the resources in the current list. Minimum: 0 Maximum: 2000

Table 4-228 CentralNetwork

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
domain_id	String	ID of the account that the instance belongs to.

Parameter	Type	Description
state	String	Central network status. <ul style="list-style-type: none"> ● AVAILABLE: The central network is available. ● UPDATING: The central network is being updated. ● FAILED: The operation on the central network failed. ● CREATING: The central network is being created. ● DELETING: The central network is being deleted. ● DELETED: The central network is deleted.
enterprise_project_id	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
tags	Array of Tag objects	Resource tags. Array Length: 1 - 20
planes	Array of CentralNetworkPlane objects	List of central network planes. Array Length: 0 - 2000
er_instances	Array of CentralNetworkErInstance objects	List of enterprise routers on a central network. Array Length: 1 - 200
connections	Array of CentralNetworkConnectionInfo objects	List of the enterprise router connections on a central network. Array Length: 0 - 2000
default_plane_id	String	Resource ID.

Table 4-229 Tag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).

Parameter	Type	Description
value	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Table 4-230 CentralNetworkPlane

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
associate_er_tables	Array of AssociateErTableDocument objects	List of the enterprise routers on the central network. Array Length: 0 - 100
exclude_er_connections	Array of ExcludeErConnectionDocument objects	Whether to exclude the connections to enterprise routers on the central network. Array Length: 0 - 100

Table 4-231 AssociateErTableDocument

Parameter	Type	Description
project_id	String	Project ID.
region_id	String	Region ID.
enterprise_router_id	String	Enterprise router ID.
enterprise_router_table_id	String	Resource ID.

Table 4-232 ExcludeErConnectionDocument

Parameter	Type	Description
[items]	Array of AssociateErInstanceDocument objects	Connections between enterprise routers managed by the central network plane.

Table 4-233 AssociateErInstanceDocument

Parameter	Type	Description
enterprise_router_id	String	Enterprise router ID.
project_id	String	Project ID.
region_id	String	Region ID.

Table 4-234 CentralNetworkErInstance

Parameter	Type	Description
id	String	Resource ID.
enterprise_router_id	String	Enterprise router ID.
project_id	String	Project ID.
region_id	String	Region ID.
asn	Long	ASN of the network instance when BGP is used for routing. Minimum: 0 Maximum: 4294967295
site_code	String	Site code definition.

Table 4-235 CentralNetworkConnectionInfo

Parameter	Type	Description
id	String	Resource ID.
plane_id	String	Resource ID.
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Bandwidth range, in Mbit/s.

Parameter	Type	Description
connection_type	String	Type of a central network connection. <ul style="list-style-type: none"> • ER-ER: connections between enterprise routers • ER-GDGW: connections between enterprise routers and global DC gateways • ER-ER_ROUTE_TABLE: connections between enterprise routers and route tables of other enterprise routers
connection_point_pair	Array of ConnectionPoint objects	Both ends of a central network connection. The length is fixed to an array of 2. Array Length: 2 - 2
state	String	Central network connection status. <ul style="list-style-type: none"> • AVAILABLE: The connection is available. • CREATING: The connection is being created. • UPDATING: The connection is being updated. • DELETING: The connection is being deleted. • FREEZING: The connection is being frozen. • UNFREEZING: The connection is being unfrozen. • RECOVERING: The connection is being recovered. • FAILED: The operation on the connection failed. • DELETED: The connection is deleted. • APPROVING: The connection is being approved. • APPROVED: The connection is approved. • UNAPPROVED: The approval failed.

Table 4-236 ConnectionPoint

Parameter	Type	Description
id	String	Resource ID.
project_id	String	Project ID.
region_id	String	Region ID.
site_code	String	Site code definition.
instance_id	String	Resource ID.

Parameter	Type	Description
type	String	Type of a central network connection point. <ul style="list-style-type: none">● ER: an enterprise router● GDGW: a global DC gateway● ER_ROUTE_TABLE: an enterprise router route table

Example Requests

Querying the central network list

```
GET /v3/{domain_id}/gcn/central-networks
```

Example Responses

Status code: 200

The central network list has been queried.

```
{
  "request_id" : "0b6ba65808f9d7277f916d44845d271c",
  "page_info" : {
    "current_count" : 1
  },
  "central_networks" : [ {
    "id" : "e096c86f-817c-418c-945c-6b1d8860a15d",
    "name" : "name",
    "created_at" : "2023-10-09T06:22:40.856Z",
    "updated_at" : "2023-10-09T06:22:40.856Z",
    "domain_id" : "XXX",
    "state" : "AVAILABLE",
    "enterprise_project_id" : "0"
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListCentralNetworksSolution {

    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");

ICredential auth = new GlobalCredentials()
    .withAk(ak)
    .withSk(sk);

CcClient client = CcClient.newBuilder()
    .withCredential(auth)
    .withRegion(CcRegion.valueOf("<YOUR REGION>"))
    .build();
ListCentralNetworksRequest request = new ListCentralNetworksRequest();
request.withLimit(<limit>);
request.withMarker("<marker>");
request.withSortKey("<sort_key>");
request.withSortDir();
request.withId();
request.withName();
request.withState();
request.withEnterpriseProjectId();
request.withEnterpriseRouterId();
request.withAttachmentInstanceId();
request.withGlobalConnectionBandwidthId();
request.withConnectionId();
try {
    ListCentralNetworksResponse response = client.listCentralNetworks(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdccc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdccc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

```
try:
    request = ListCentralNetworksRequest()
    request.limit = <limit>
    request.marker = "<marker>"
    request.sort_key = "<sort_key>"
    request.sort_dir =
    request.id =
    request.name =
    request.state =
    request.enterprise_project_id =
    request.enterprise_router_id =
    request.attachment_instance_id =
    request.global_connection_bandwidth_id =
    request.connection_id =
    response = client.list_central_networks(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListCentralNetworksRequest{}
    limitRequest := int32(<limit>)
    request.Limit = &limitRequest
    markerRequest := "<marker>"
    request.Marker = &markerRequest
    sortKeyRequest := "<sort_key>"
    request.SortKey = &sortKeyRequest
    response, err := client.ListCentralNetworks(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```


More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The central network list has been queried.

Error Codes

See [Error Codes](#).

4.7.3 Querying a Central Network

Function

This API is used to query the details of a central network.

Calling Method

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

URI

GET /v3/{domain_id}/gcn/central-networks/{central_network_id}

Table 4-237 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
central_network_id	Yes	String	Central network ID. Minimum: 36 Maximum: 36

Request Parameters

Table 4-238 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 200

Table 4-239 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
central_network	CentralNetwork object	Central network.

Table 4-240 CentralNetwork

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
domain_id	String	ID of the account that the instance belongs to.

Parameter	Type	Description
state	String	Central network status. <ul style="list-style-type: none"> ● AVAILABLE: The central network is available. ● UPDATING: The central network is being updated. ● FAILED: The operation on the central network failed. ● CREATING: The central network is being created. ● DELETING: The central network is being deleted. ● DELETED: The central network is deleted.
enterprise_project_id	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
tags	Array of Tag objects	Resource tags. Array Length: 1 - 20
planes	Array of CentralNetworkPlane objects	List of central network planes. Array Length: 0 - 2000
er_instances	Array of CentralNetworkErInstance objects	List of enterprise routers on a central network. Array Length: 1 - 200
connections	Array of CentralNetworkConnectionInfo objects	List of the enterprise router connections on a central network. Array Length: 0 - 2000
default_plane_id	String	Resource ID.

Table 4-241 Tag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).

Parameter	Type	Description
value	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Table 4-242 CentralNetworkPlane

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
associate_er_tables	Array of AssociateErTableDocument objects	List of the enterprise routers on the central network. Array Length: 0 - 100
exclude_er_connections	Array of ExcludeErConnectionDocument objects	Whether to exclude the connections to enterprise routers on the central network. Array Length: 0 - 100

Table 4-243 AssociateErTableDocument

Parameter	Type	Description
project_id	String	Project ID.
region_id	String	Region ID.
enterprise_router_id	String	Enterprise router ID.
enterprise_router_table_id	String	Resource ID.

Table 4-244 ExcludeErConnectionDocument

Parameter	Type	Description
[items]	Array of AssociateErInstanceDocument objects	Connections between enterprise routers managed by the central network plane.

Table 4-245 AssociateErInstanceDocument

Parameter	Type	Description
enterprise_router_id	String	Enterprise router ID.
project_id	String	Project ID.
region_id	String	Region ID.

Table 4-246 CentralNetworkErInstance

Parameter	Type	Description
id	String	Resource ID.
enterprise_router_id	String	Enterprise router ID.
project_id	String	Project ID.
region_id	String	Region ID.
asn	Long	ASN of the network instance when BGP is used for routing. Minimum: 0 Maximum: 4294967295
site_code	String	Site code definition.

Table 4-247 CentralNetworkConnectionInfo

Parameter	Type	Description
id	String	Resource ID.
plane_id	String	Resource ID.
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Bandwidth range, in Mbit/s.

Parameter	Type	Description
connection_type	String	Type of a central network connection. <ul style="list-style-type: none"> • ER-ER: connections between enterprise routers • ER-GDGW: connections between enterprise routers and global DC gateways • ER-ER_ROUTE_TABLE: connections between enterprise routers and route tables of other enterprise routers
connection_point_pair	Array of ConnectionPoint objects	Both ends of a central network connection. The length is fixed to an array of 2. Array Length: 2 - 2
state	String	Central network connection status. <ul style="list-style-type: none"> • AVAILABLE: The connection is available. • CREATING: The connection is being created. • UPDATING: The connection is being updated. • DELETING: The connection is being deleted. • FREEZING: The connection is being frozen. • UNFREEZING: The connection is being unfrozen. • RECOVERING: The connection is being recovered. • FAILED: The operation on the connection failed. • DELETED: The connection is deleted. • APPROVING: The connection is being approved. • APPROVED: The connection is approved. • UNAPPROVED: The approval failed.

Table 4-248 ConnectionPoint

Parameter	Type	Description
id	String	Resource ID.
project_id	String	Project ID.
region_id	String	Region ID.
site_code	String	Site code definition.
instance_id	String	Resource ID.

Parameter	Type	Description
type	String	Type of a central network connection point. <ul style="list-style-type: none">● ER: an enterprise router● GDGW: a global DC gateway● ER_ROUTE_TABLE: an enterprise router route table

Example Requests

Query the details of a central network

```
GET /v3/{domain_id}/gcn/central-networks/{central_network_id}
```

Example Responses

Status code: 200

The details of a central network have been queried.

```
{
  "request_id" : "ebfebe2205832c9ed7c3d1131041cc0f",
  "central_network" : {
    "id" : "e096c86f-817c-418c-945c-6b1d8860a15d",
    "name" : "name",
    "created_at" : "2023-10-09T06:22:40.856Z",
    "updated_at" : "2023-10-09T06:22:40.856Z",
    "domain_id" : "XXX",
    "state" : "AVAILABLE",
    "enterprise_project_id" : "0"
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class ShowCentralNetworkSolution {

    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");

ICredential auth = new GlobalCredentials()
    .withAk(ak)
    .withSk(sk);

CcClient client = CcClient.newBuilder()
    .withCredential(auth)
    .withRegion(CcRegion.valueOf("<YOUR REGION>"))
    .build();
ShowCentralNetworkRequest request = new ShowCentralNetworkRequest();
try {
    ShowCentralNetworkResponse response = client.showCentralNetwork(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ShowCentralNetworkRequest()
        response = client.show_central_network(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/global"
cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The details of a central network have been queried.

Error Codes

See [Error Codes](#).

4.7.4 Updating a Central Network

Function

This API is used to update a central network.

Calling Method

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

URI

PUT /v3/{domain_id}/gcn/central-networks/{central_network_id}

Table 4-249 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
central_network_id	Yes	String	Central network ID. Minimum: 36 Maximum: 36

Request Parameters

Table 4-250 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-251 Request body parameters

Parameter	Mandatory	Type	Description
central_network	Yes	UpdateCentralNetwork object	Details of the central network to be updated.

Table 4-252 UpdateCentralNetwork

Parameter	Mandatory	Type	Description
name	No	String	Resource name.

Parameter	Mandatory	Type	Description
description	No	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
tags	No	Array of Tag objects	Resource tags. Array Length: 1 - 20

Table 4-253 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	No	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Response Parameters

Status code: 200

Table 4-254 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
central_network	CentralNetwork object	Central network.

Table 4-255 CentralNetwork

Parameter	Type	Description
id	String	Resource ID.

Parameter	Type	Description
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
domain_id	String	ID of the account that the instance belongs to.
state	String	Central network status. <ul style="list-style-type: none"> ● AVAILABLE: The central network is available. ● UPDATING: The central network is being updated. ● FAILED: The operation on the central network failed. ● CREATING: The central network is being created. ● DELETING: The central network is being deleted. ● DELETED: The central network is deleted.
enterprise_project_id	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
tags	Array of Tag objects	Resource tags. Array Length: 1 - 20
planes	Array of CentralNetworkPlane objects	List of central network planes. Array Length: 0 - 2000
er_instances	Array of CentralNetworkErInstance objects	List of enterprise routers on a central network. Array Length: 1 - 200

Parameter	Type	Description
connections	Array of CentralNetworkConnectionInfo objects	List of the enterprise router connections on a central network. Array Length: 0 - 2000
default_plane_id	String	Resource ID.

Table 4-256 Tag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Table 4-257 CentralNetworkPlane

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
associate_er_tables	Array of AssociateErTableDocument objects	List of the enterprise routers on the central network. Array Length: 0 - 100
exclude_er_connections	Array of ExcludeErConnectionDocument objects	Whether to exclude the connections to enterprise routers on the central network. Array Length: 0 - 100

Table 4-258 AssociateErTableDocument

Parameter	Type	Description
project_id	String	Project ID.
region_id	String	Region ID.

Parameter	Type	Description
enterprise_router_id	String	Enterprise router ID.
enterprise_router_table_id	String	Resource ID.

Table 4-259 ExcludeErConnectionDocument

Parameter	Type	Description
[items]	Array of AssociateErInstanceDocument objects	Connections between enterprise routers managed by the central network plane.

Table 4-260 AssociateErInstanceDocument

Parameter	Type	Description
enterprise_router_id	String	Enterprise router ID.
project_id	String	Project ID.
region_id	String	Region ID.

Table 4-261 CentralNetworkErInstance

Parameter	Type	Description
id	String	Resource ID.
enterprise_router_id	String	Enterprise router ID.
project_id	String	Project ID.
region_id	String	Region ID.
asn	Long	ASN of the network instance when BGP is used for routing. Minimum: 0 Maximum: 4294967295
site_code	String	Site code definition.

Table 4-262 CentralNetworkConnectionInfo

Parameter	Type	Description
id	String	Resource ID.
plane_id	String	Resource ID.
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Bandwidth range, in Mbit/s.
connection_type	String	Type of a central network connection. <ul style="list-style-type: none"> ● ER-ER: connections between enterprise routers ● ER-GDGW: connections between enterprise routers and global DC gateways ● ER-ER_ROUTE_TABLE: connections between enterprise routers and route tables of other enterprise routers
connection_point_pair	Array of ConnectionPoint objects	Both ends of a central network connection. The length is fixed to an array of 2. Array Length: 2 - 2
state	String	Central network connection status. <ul style="list-style-type: none"> ● AVAILABLE: The connection is available. ● CREATING: The connection is being created. ● UPDATING: The connection is being updated. ● DELETING: The connection is being deleted. ● FREEZING: The connection is being frozen. ● UNFREEZING: The connection is being unfrozen. ● RECOVERING: The connection is being recovered. ● FAILED: The operation on the connection failed. ● DELETED: The connection is deleted. ● APPROVING: The connection is being approved. ● APPROVED: The connection is approved. ● UNAPPROVED: The approval failed.

Table 4-263 ConnectionPoint

Parameter	Type	Description
id	String	Resource ID.
project_id	String	Project ID.
region_id	String	Region ID.
site_code	String	Site code definition.
instance_id	String	Resource ID.
type	String	Type of a central network connection point. <ul style="list-style-type: none"> ● ER: an enterprise router ● GDGW: a global DC gateway ● ER_ROUTE_TABLE: an enterprise router route table

Example Requests

Updating a central network

```
PUT /v3/{domain_id}/gcn/central-networks/{central_network_id}
{
  "central_network": {
    "description": "new description"
  }
}
```

Example Responses

Status code: 200

The central network has been updated.

```
{
  "request_id": "b0f83900a5850b757cc59bf919d90947",
  "central_network": {
    "id": "e096c86f-817c-418c-945c-6b1d8860a15d",
    "name": "name",
    "description": "new description",
    "created_at": "2023-10-09T06:22:40.856Z",
    "updated_at": "2023-10-09T06:27:55.75Z",
    "domain_id": "XXX",
    "state": "AVAILABLE",
    "enterprise_project_id": "0"
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Updating a central network


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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class UpdateCentralNetworkSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

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

        UpdateCentralNetworkRequest request = new UpdateCentralNetworkRequest();
        UpdateCentralNetworkRequestBody body = new UpdateCentralNetworkRequestBody();
        UpdateCentralNetwork centralNetworkbody = new UpdateCentralNetwork();
        centralNetworkbody.withDescription("new description");
        body.withCentralNetwork(centralNetworkbody);
        request.withBody(body);
        try {
            UpdateCentralNetworkResponse response = client.updateCentralNetwork(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

Updating a central network

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
sk = __import__('os').getenv("CLOUD_SDK_SK")

credentials = GlobalCredentials(ak, sk) \

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

try:
    request = UpdateCentralNetworkRequest()
    centralNetworkbody = UpdateCentralNetwork(
        description="new description"
    )
    request.body = UpdateCentralNetworkRequestBody(
        central_network=centralNetworkbody
    )
    response = client.update_central_network(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

Updating a central network

```
package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateCentralNetworkRequest{
        descriptionCentralNetwork:= "new description"
        centralNetworkbody := &model.UpdateCentralNetwork{
            Description: &descriptionCentralNetwork,
        }
    }
    request.Body = &model.UpdateCentralNetworkRequestBody{
        CentralNetwork: centralNetworkbody,
    }
```

```

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

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The central network has been updated.

Error Codes

See [Error Codes](#).

4.7.5 Deleting a Central Network

Function

This API is used to delete a central network. Remove the attachments before deleting the central network.

Calling Method

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

URI

DELETE /v3/{domain_id}/gcn/central-networks/{central_network_id}

Table 4-264 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
central_network_id	Yes	String	Central network ID. Minimum: 36 Maximum: 36

Request Parameters

Table 4-265 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 202

Table 4-266 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
central_network	CentralNetwork object	Central network.

Table 4-267 CentralNetwork

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
domain_id	String	ID of the account that the instance belongs to.

Parameter	Type	Description
state	String	Central network status. <ul style="list-style-type: none"> ● AVAILABLE: The central network is available. ● UPDATING: The central network is being updated. ● FAILED: The operation on the central network failed. ● CREATING: The central network is being created. ● DELETING: The central network is being deleted. ● DELETED: The central network is deleted.
enterprise_project_id	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
tags	Array of Tag objects	Resource tags. Array Length: 1 - 20
planes	Array of CentralNetworkPlane objects	List of central network planes. Array Length: 0 - 2000
er_instances	Array of CentralNetworkErInstance objects	List of enterprise routers on a central network. Array Length: 1 - 200
connections	Array of CentralNetworkConnectionInfo objects	List of the enterprise router connections on a central network. Array Length: 0 - 2000
default_plane_id	String	Resource ID.

Table 4-268 Tag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).

Parameter	Type	Description
value	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Table 4-269 CentralNetworkPlane

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
associate_er_tables	Array of AssociateErTableDocument objects	List of the enterprise routers on the central network. Array Length: 0 - 100
exclude_er_connections	Array of ExcludeErConnectionDocument objects	Whether to exclude the connections to enterprise routers on the central network. Array Length: 0 - 100

Table 4-270 AssociateErTableDocument

Parameter	Type	Description
project_id	String	Project ID.
region_id	String	Region ID.
enterprise_router_id	String	Enterprise router ID.
enterprise_router_table_id	String	Resource ID.

Table 4-271 ExcludeErConnectionDocument

Parameter	Type	Description
[items]	Array of AssociateErInstanceDocument objects	Connections between enterprise routers managed by the central network plane.

Table 4-272 AssociateErInstanceDocument

Parameter	Type	Description
enterprise_router_id	String	Enterprise router ID.
project_id	String	Project ID.
region_id	String	Region ID.

Table 4-273 CentralNetworkErInstance

Parameter	Type	Description
id	String	Resource ID.
enterprise_router_id	String	Enterprise router ID.
project_id	String	Project ID.
region_id	String	Region ID.
asn	Long	ASN of the network instance when BGP is used for routing. Minimum: 0 Maximum: 4294967295
site_code	String	Site code definition.

Table 4-274 CentralNetworkConnectionInfo

Parameter	Type	Description
id	String	Resource ID.
plane_id	String	Resource ID.
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Bandwidth range, in Mbit/s.

Parameter	Type	Description
connection_type	String	Type of a central network connection. <ul style="list-style-type: none"> ● ER-ER: connections between enterprise routers ● ER-GDGW: connections between enterprise routers and global DC gateways ● ER-ER_ROUTE_TABLE: connections between enterprise routers and route tables of other enterprise routers
connection_point_pair	Array of ConnectionPoint objects	Both ends of a central network connection. The length is fixed to an array of 2. Array Length: 2 - 2
state	String	Central network connection status. <ul style="list-style-type: none"> ● AVAILABLE: The connection is available. ● CREATING: The connection is being created. ● UPDATING: The connection is being updated. ● DELETING: The connection is being deleted. ● FREEZING: The connection is being frozen. ● UNFREEZING: The connection is being unfrozen. ● RECOVERING: The connection is being recovered. ● FAILED: The operation on the connection failed. ● DELETED: The connection is deleted. ● APPROVING: The connection is being approved. ● APPROVED: The connection is approved. ● UNAPPROVED: The approval failed.

Table 4-275 ConnectionPoint

Parameter	Type	Description
id	String	Resource ID.
project_id	String	Project ID.
region_id	String	Region ID.
site_code	String	Site code definition.
instance_id	String	Resource ID.

Parameter	Type	Description
type	String	Type of a central network connection point. <ul style="list-style-type: none">● ER: an enterprise router● GDGW: a global DC gateway● ER_ROUTE_TABLE: an enterprise router route table

Example Requests

Deleting a central network

```
DELETE /v3/{domain_id}/gcn/central-networks/{central_network_id}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class DeleteCentralNetworkSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteCentralNetworkRequest request = new DeleteCentralNetworkRequest();
        try {
            DeleteCentralNetworkResponse response = client.deleteCentralNetwork(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = DeleteCentralNetworkRequest()
        response = client.delete_central_network(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")
```

```

auth := global.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    Build()

client := cc.NewCcClient(
    cc.CcClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

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

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
202	The central network has been deleted.

Error Codes

See [Error Codes](#).

4.7.6 Adding a Tag to a Central Network

Function

This API is used to add a tag to a central network.

Calling Method

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

URI

POST /v3/{domain_id}/gcn/central-networks/{central_network_id}/tag

Table 4-276 Path Parameters

Parameter	Mandatory	Type	Description
central_network_id	Yes	String	Central network ID. Minimum: 36 Maximum: 36
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Request Parameters

Table 4-277 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-278 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of Tag objects	Tags. Array Length: 1 - 20

Table 4-279 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	No	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Response Parameters

Status code: 204

Table 4-280 Response header parameters

Parameter	Type	Description
x-request-id	-	-

Example Requests

Adding a tag to a central network

```
POST /v3/{domain_id}/gcn/central-networks/{central_network_id}/tag
{
  "tags": [ {
    "key": "key",
    "value": "value"
  } ]
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Adding a tag to a central network

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class TagCentralNetworkSolution {

    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");
```

```
ICredential auth = new GlobalCredentials()
    .withAk(ak)
    .withSk(sk);

CcClient client = CcClient.newBuilder()
    .withCredential(auth)
    .withRegion(CcRegion.valueOf("<YOUR REGION>"))
    .build();
TagCentralNetworkRequest request = new TagCentralNetworkRequest();
TagCentralNetworkRequestBody body = new TagCentralNetworkRequestBody();
List<Tag> listbodyTags = new ArrayList<>();
listbodyTags.add(
    new Tag()
        .withKey("key")
        .withValue("value")
);
body.withTags(listbodyTags);
request.withBody(body);
try {
    TagCentralNetworkResponse response = client.tagCentralNetwork(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

Adding a tag to a central network

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdccc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdccc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = TagCentralNetworkRequest()
        listTagsbody = [
            Tag(
                key="key",
                value="value"
            )
        ]
```

```
]
request.body = TagCentralNetworkRequestBody(
    tags=listTagsbody
)
response = client.tag_central_network(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

Adding a tag to a central network

```
package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.TagCentralNetworkRequest{}
    valueTags:= "value"
    var listTagsbody = []model.Tag{
        {
            Key: "key",
            Value: &valueTags,
        },
    }
    request.Body = &model.TagCentralNetworkRequestBody{
        Tags: listTagsbody,
    }
    response, err := client.TagCentralNetwork(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	The tag has been added to the central network.

Error Codes

See [Error Codes](#).

4.7.7 Deleting a Tag from a Central Network

Function

This API is used to delete a tag from a central network.

Calling Method

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

URI

POST /v3/{domain_id}/gcn/central-networks/{central_network_id}/untag

Table 4-281 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
central_network_id	Yes	String	Central network ID. Minimum: 36 Maximum: 36

Request Parameters

Table 4-282 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-283 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of Tag objects	Tags. Array Length: 1 - 20

Table 4-284 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	No	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Response Parameters

Status code: 204

Table 4-285 Response header parameters

Parameter	Type	Description
x-request-id	-	-

Example Requests

Deleting a tag from a central network

```
POST /v3/{domain_id}/gcn/central-networks/{central_network_id}/untag
{
  "tags": [ {
    "key": "key",
    "value": "value"
  } ]
}
```

Example Responses

None

Status Codes

Status Code	Description
204	The tag has been deleted from the central network.

Error Codes

See [Error Codes](#).

4.7.8 Querying the Tags Added to a Central Network

Function

This API is used to query the tags added to a central network.

Calling Method

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

URI

GET /v3/{domain_id}/gcn/central-networks/tags

Table 4-286 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Request Parameters

Table 4-287 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: **200**

Table 4-288 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
tags	Array of MultivaluedTag objects	All tags of the central network. Array Length: 1 - 200

Table 4-289 MultivaluedTag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
values	Array of strings	List of values with the same key. Array Length: 1 - 20

Example Requests

Querying the tags added to a central network

```
GET /v3/{domain_id}/gcn/central-networks/tags
```

Example Responses

Status code: **200**

The tags added to a central network have been queried.

```
{
  "request_id" : "2f68486e542a0bb23ab86a826f909ecf",
  "tags" : [ {
    "key" : "key1",
    "values" : [ "value1" ]
  }, {
    "key" : "key2",
    "values" : [ "value2" ]
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class ListCentralNetworkTagsSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ListCentralNetworkTagsRequest request = new ListCentralNetworkTagsRequest();
        try {
            ListCentralNetworkTagsResponse response = client.listCentralNetworkTags(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ListCentralNetworkTagsRequest()
        response = client.list_central_network_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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListCentralNetworkTagsRequest{}
    response, err := client.ListCentralNetworkTags(request)
```

```

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

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The tags added to a central network have been queried.

Error Codes

See [Error Codes](#).

4.7.9 Querying Central Networks by Tag

Function

This API is used to query central networks by tag.

Calling Method

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

URI

POST /v3/{domain_id}/gcn/central-networks/filter

Table 4-290 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Table 4-291 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 1000 Minimum: 1 Maximum: 1000 Default: 1000
marker	No	String	Pagination query information. You can obtain the marker values from the response of the last API call. You can enter the marker value of the previous page or the next page. If you enter the marker value of the previous page, the previous page will be queried. If you enter the marker value of the next page, the next page will be queried. During pagination query, the query criteria, including the filters, sorting criteria, and the limit value, cannot be modified. Minimum: 1 Maximum: 4096

Request Parameters

Table 4-292 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-293 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of MultivaluedTag objects	Tags. Array Length: 1 - 20

Table 4-294 MultivaluedTag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
values	Yes	Array of strings	List of values with the same key. Array Length: 1 - 20

Response Parameters

Status code: 200

Table 4-295 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
page_info	PageInfo object	Pagination query information.
central_networks	Array of CentralNetwork objects	Central network list. Array Length: 0 - 2000

Table 4-296 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier. Minimum: 1 Maximum: 4096
previous_mar ker	String	Forward pagination identifier. Minimum: 1 Maximum: 4096
current_count	Integer	Number of the resources in the current list. Minimum: 0 Maximum: 2000

Table 4-297 CentralNetwork

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
domain_id	String	ID of the account that the instance belongs to.
state	String	Central network status. <ul style="list-style-type: none"> ● AVAILABLE: The central network is available. ● UPDATING: The central network is being updated. ● FAILED: The operation on the central network failed. ● CREATING: The central network is being created. ● DELETING: The central network is being deleted. ● DELETED: The central network is deleted.

Parameter	Type	Description
enterprise_project_id	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
tags	Array of Tag objects	Resource tags. Array Length: 1 - 20
planes	Array of CentralNetworkPlane objects	List of central network planes. Array Length: 0 - 2000
er_instances	Array of CentralNetworkErInstance objects	List of enterprise routers on a central network. Array Length: 1 - 200
connections	Array of CentralNetworkConnectionInfo objects	List of the enterprise router connections on a central network. Array Length: 0 - 2000
default_plane_id	String	Resource ID.

Table 4-298 Tag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Table 4-299 CentralNetworkPlane

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.

Parameter	Type	Description
associate_er_tables	Array of AssociateErTableDocument objects	List of the enterprise routers on the central network. Array Length: 0 - 100
exclude_er_connections	Array of ExcludeErConnectionDocument objects	Whether to exclude the connections to enterprise routers on the central network. Array Length: 0 - 100

Table 4-300 AssociateErTableDocument

Parameter	Type	Description
project_id	String	Project ID.
region_id	String	Region ID.
enterprise_router_id	String	Enterprise router ID.
enterprise_router_table_id	String	Resource ID.

Table 4-301 ExcludeErConnectionDocument

Parameter	Type	Description
[items]	Array of AssociateErInstanceDocument objects	Connections between enterprise routers managed by the central network plane.

Table 4-302 AssociateErInstanceDocument

Parameter	Type	Description
enterprise_router_id	String	Enterprise router ID.
project_id	String	Project ID.
region_id	String	Region ID.

Table 4-303 CentralNetworkErInstance

Parameter	Type	Description
id	String	Resource ID.
enterprise_router_id	String	Enterprise router ID.
project_id	String	Project ID.
region_id	String	Region ID.
asn	Long	ASN of the network instance when BGP is used for routing. Minimum: 0 Maximum: 4294967295
site_code	String	Site code definition.

Table 4-304 CentralNetworkConnectionInfo

Parameter	Type	Description
id	String	Resource ID.
plane_id	String	Resource ID.
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Bandwidth range, in Mbit/s.
connection_type	String	Type of a central network connection. <ul style="list-style-type: none"> ● ER-ER: connections between enterprise routers ● ER-GDGW: connections between enterprise routers and global DC gateways ● ER-ER_ROUTE_TABLE: connections between enterprise routers and route tables of other enterprise routers
connection_point_pair	Array of ConnectionPoint objects	Both ends of a central network connection. The length is fixed to an array of 2. Array Length: 2 - 2

Parameter	Type	Description
state	String	<p>Central network connection status.</p> <ul style="list-style-type: none"> ● AVAILABLE: The connection is available. ● CREATING: The connection is being created. ● UPDATING: The connection is being updated. ● DELETING: The connection is being deleted. ● FREEZING: The connection is being frozen. ● UNFREEZING: The connection is being unfrozen. ● RECOVERING: The connection is being recovered. ● FAILED: The operation on the connection failed. ● DELETED: The connection is deleted. ● APPROVING: The connection is being approved. ● APPROVED: The connection is approved. ● UNAPPROVED: The approval failed.

Table 4-305 ConnectionPoint

Parameter	Type	Description
id	String	Resource ID.
project_id	String	Project ID.
region_id	String	Region ID.
site_code	String	Site code definition.
instance_id	String	Resource ID.
type	String	<p>Type of a central network connection point.</p> <ul style="list-style-type: none"> ● ER: an enterprise router ● GDGW: a global DC gateway ● ER_ROUTE_TABLE: an enterprise router route table

Example Requests

Querying central networks by tag

```
POST https://{cc_endpoint}/v3/{domain_id}/gcn/central-networks/filter
```

```
{
```

```
"tags" : [ {  
  "key" : "key",  
  "values" : [ "value" ]  
} ]  
}
```

Example Responses

Status code: 200

Central networks are queried by tag.

```
{  
  "request_id" : "0b6ba65808f9d7277f916d44845d271c",  
  "page_info" : {  
    "current_count" : 1  
  },  
  "central_networks" : [ {  
    "id" : "e096c86f-817c-418c-945c-6b1d8860a15d",  
    "name" : "name",  
    "created_at" : "2023-10-09T06:22:40.856Z",  
    "updated_at" : "2023-10-09T06:22:40.856Z",  
    "domain_id" : "XXX",  
    "state" : "AVAILABLE",  
    "enterprise_project_id" : "0"  
  } ]  
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Querying central networks by tag

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.GlobalCredentials;  
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.cc.v3.region.CcRegion;  
import com.huaweicloud.sdk.cc.v3.*;  
import com.huaweicloud.sdk.cc.v3.model.*;  
  
import java.util.List;  
import java.util.ArrayList;  
  
public class ListCentralNetworksByTagsSolution {  
  
    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");  
  
        ICredential auth = new GlobalCredentials()  
            .withAk(ak)  
            .withSk(sk);  
  
        CcClient client = CcClient.newBuilder()
```

```
        .withCredential(auth)
        .withRegion(CcRegion.valueOf("<YOUR REGION>"))
        .build();
ListCentralNetworksByTagsRequest request = new ListCentralNetworksByTagsRequest();
request.withLimit(<limit>);
request.withMarker("<marker>");
ListCentralNetworksByTagsRequestBody body = new ListCentralNetworksByTagsRequestBody();
List<String> listTagsValues = new ArrayList<>();
listTagsValues.add("value");
List<MultivaluedTag> listbodyTags = new ArrayList<>();
listbodyTags.add(
    new MultivaluedTag()
        .withKey("key")
        .withValues(listTagsValues)
);
body.withTags(listbodyTags);
request.withBody(body);
try {
    ListCentralNetworksByTagsResponse response = client.listCentralNetworksByTags(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

Querying central networks by tag

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ListCentralNetworksByTagsRequest()
        request.limit = <limit>
        request.marker = "<marker>"
        listValuesTags = [
            "value"
        ]
        listTagsbody = [
```

```
        MultivaluedTag(  
            key="key",  
            values=listValuesTags  
        )  
    ]  
    request.body = ListCentralNetworksByTagsRequestBody(  
        tags=listTagsbody  
    )  
    response = client.list_central_networks_by_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

Querying central networks by tag

```
package main  
  
import (  
    "fmt"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"  
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")  
  
    auth := global.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        Build()  
  
    client := cc.NewCcClient(  
        cc.CcClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).  
            Build())  
  
    request := &model.ListCentralNetworksByTagsRequest{}  
    limitRequest:= int32(<limit>)  
    request.Limit = &limitRequest  
    markerRequest:= "<marker>"  
    request.Marker = &markerRequest  
    var listValuesTags = []string{  
        "value",  
    }  
    var listTagsbody = []model.MultivaluedTag{  
        {  
            Key: "key",  
            Values: listValuesTags,  
        },  
    }  
    request.Body = &model.ListCentralNetworksByTagsRequestBody{  
        Tags: listTagsbody,  
    }  
    response, err := client.ListCentralNetworksByTags(request)  
    if err == nil {
```



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

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Central networks are queried by tag.

Error Codes

See [Error Codes](#).

4.7.10 Adding a Central Network Policy

Function

This API is used to add a central network policy. A policy cannot be modified. If the policy cannot meet your requirements, you need to add a new policy.

Calling Method

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

URI

POST /v3/{domain_id}/gcn/central-network/{central_network_id}/policies

Table 4-306 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
central_network_id	Yes	String	Central network ID. Minimum: 36 Maximum: 36

Request Parameters

Table 4-307 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-308 Request body parameters

Parameter	Mandatory	Type	Description
central_network_policy_document	Yes	CentralNetworkPolicyDocument object	Central network policy document.

Table 4-309 CentralNetworkPolicyDocument

Parameter	Mandatory	Type	Description
default_plane	Yes	String	Name of the default central network plane. Default: default-plane Minimum: 1 Maximum: 64
planes	Yes	Array of CentralNetworkPlaneDocument objects	List of the central network planes. Array Length: 1 - 100
er_instances	No	Array of AssociateEnterpriseInstanceDocument objects	List of the enterprise routers on the central network. Array Length: 1 - 200

Table 4-310 CentralNetworkPlaneDocument

Parameter	Mandatory	Type	Description
name	Yes	String	Resource name.

Parameter	Mandatory	Type	Description
associate_er_tables	No	Array of AssociateErTableDocument objects	List of the enterprise routers on the central network. Array Length: 0 - 100
exclude_er_connections	No	Array of ExcludeErConnectionDocument objects	Whether to exclude the connections to enterprise routers on the central network. Array Length: 0 - 100

Table 4-311 AssociateErTableDocument

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
region_id	Yes	String	Region ID.
enterprise_router_id	Yes	String	Enterprise router ID.
enterprise_router_table_id	Yes	String	Resource ID.

Table 4-312 ExcludeErConnectionDocument

Parameter	Mandatory	Type	Description
[items]	No	Array of AssociateErInstanceDocument objects	Connections between enterprise routers managed by the central network plane.

Table 4-313 AssociateErInstanceDocument

Parameter	Mandatory	Type	Description
enterprise_router_id	Yes	String	Enterprise router ID.
project_id	Yes	String	Project ID.
region_id	Yes	String	Region ID.

Response Parameters

Status code: 201

Table 4-314 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
central_network_policy	CentralNetworkPolicy object	Details of the central network policy.

Table 4-315 CentralNetworkPolicy

Parameter	Type	Description
id	String	Resource ID.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
domain_id	String	ID of the account that the instance belongs to.
state	String	Central network policy status. <ul style="list-style-type: none"> • AVAILABLE: The policy is available. • CANCELING: The policy is being cancelled. • APPLYING: The policy is being applied. • FAILED: The operation on the policy failed. • DELETED: The policy is deleted.
central_network_id	String	Central network ID.
document_template_version	String	Document template version. <ul style="list-style-type: none"> • 2022.08.30: August 30, 2022
is_applied	Boolean	Whether the policy is applied or not.
version	Integer	Version of the central network policy. Minimum: 1 Maximum: 4096
document	CentralNetworkPolicyDocument object	Central network policy document.

Table 4-316 CentralNetworkPolicyDocument

Parameter	Type	Description
default_plane	String	Name of the default central network plane. Default: default-plane Minimum: 1 Maximum: 64
planes	Array of CentralNetworkPlaneDocument objects	List of the central network planes. Array Length: 1 - 100
er_instances	Array of AssociateEnterpriseInstanceDocument objects	List of the enterprise routers on the central network. Array Length: 1 - 200

Table 4-317 CentralNetworkPlaneDocument

Parameter	Type	Description
name	String	Resource name.
associate_er_tables	Array of AssociateEnterpriseTableDocument objects	List of the enterprise routers on the central network. Array Length: 0 - 100
exclude_er_connections	Array of ExcludeEnterpriseConnectionDocument objects	Whether to exclude the connections to enterprise routers on the central network. Array Length: 0 - 100

Table 4-318 AssociateErTableDocument

Parameter	Type	Description
project_id	String	Project ID.
region_id	String	Region ID.
enterprise_router_id	String	Enterprise router ID.
enterprise_router_table_id	String	Resource ID.

Table 4-319 ExcludeErConnectionDocument

Parameter	Type	Description
[items]	Array of AssociateErInstanceDocument objects	Connections between enterprise routers managed by the central network plane.

Table 4-320 AssociateErInstanceDocument

Parameter	Type	Description
enterprise_router_id	String	Enterprise router ID.
project_id	String	Project ID.
region_id	String	Region ID.

Example Requests

Adding a central network policy

POST /v3/{domain_id}/gcn/central-network/{central_network_id}/policies

```
{
  "central_network_policy_document" : {
    "default_plane" : "default-plane",
    "planes" : [ {
      "name" : "default-plane"
    } ],
    "er_instances" : [ {
      "enterprise_router_id" : "395b0884-aab4-4bf0-8cb8-7f2da26708dd",
      "project_id" : "XXX",
      "region_id" : "cn-north-4"
    } ]
  }
}
```

Example Responses

Status code: 201

The central network policy has been added.

```
{
  "request_id" : "76bfd2b0d492d0e479fbbd3981869c12",
  "central_network_policy" : {
    "id" : "f03478aa-3975-4ca7-9fb2-b49428a01636",
    "created_at" : "2023-10-09T06:22:40.857Z",
    "domain_id" : "XXX",
    "state" : "AVAILABLE",
    "central_network_id" : "e096c86f-817c-418c-945c-6b1d8860a15d",
    "document_template_version" : "2022.08.30",
    "is_applied" : true,
    "version" : 1,
    "document" : {
      "default_plane" : "default-plane",
```

```
"planes" : [ {
  "name" : "default-plane",
  "associate_er_tables" : [ {
    "project_id" : "XXX",
    "region_id" : "cn-north-4",
    "enterprise_router_id" : "395b0884-aab4-4bf0-8cb8-7f2da26708dd",
    "enterprise_router_table_id" : "cc542128-5c2d-402a-8960-53bb2ed9484e"
  } ]
},
"er_instances" : [ {
  "enterprise_router_id" : "395b0884-aab4-4bf0-8cb8-7f2da26708dd",
  "project_id" : "XXX",
  "region_id" : "cn-north-4"
} ]
}
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Adding a central network policy

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateCentralNetworkPolicySolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateCentralNetworkPolicyRequest request = new CreateCentralNetworkPolicyRequest();
        CreateCentralNetworkPolicyRequestBody body = new CreateCentralNetworkPolicyRequestBody();
        List<AssociateErInstanceDocument> listCentralNetworkPolicyDocumentErInstances = new
        ArrayList<>();
        listCentralNetworkPolicyDocumentErInstances.add(
            new AssociateErInstanceDocument()
                .withEnterpriseRouterId("395b0884-aab4-4bf0-8cb8-7f2da26708dd")
                .withRegionId("cn-north-4")
        );
    }
}
```

```
        .withProjectId("XXX")
    );
    List<CentralNetworkPlaneDocument> listCentralNetworkPolicyDocumentPlanes = new ArrayList<>();
    listCentralNetworkPolicyDocumentPlanes.add(
        new CentralNetworkPlaneDocument()
            .withName("default-plane")
    );
    CentralNetworkPolicyDocument centralNetworkPolicyDocumentbody = new
CentralNetworkPolicyDocument();
    centralNetworkPolicyDocumentbody.withDefaultPlane("default-plane")
        .withPlanes(listCentralNetworkPolicyDocumentPlanes)
        .withErInstances(listCentralNetworkPolicyDocumentErInstances);
    body.withCentralNetworkPolicyDocument(centralNetworkPolicyDocumentbody);
    request.withBody(body);
    try {
        CreateCentralNetworkPolicyResponse response = client.createCentralNetworkPolicy(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

Adding a central network policy

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = CreateCentralNetworkPolicyRequest()
        listErInstancesCentralNetworkPolicyDocument = [
            AssociateErInstanceDocument(
                enterprise_router_id="395b0884-aab4-4bf0-8cb8-7f2da26708dd",
                region_id="cn-north-4",
                project_id="XXX"
            )
        ]
        listPlanesCentralNetworkPolicyDocument = [
            CentralNetworkPlaneDocument(
```



```
        name="default-plane"
    )
]
centralNetworkPolicyDocumentbody = CentralNetworkPolicyDocument(
    default_plane="default-plane",
    planes=listPlanesCentralNetworkPolicyDocument,
    er_instances=listErInstancesCentralNetworkPolicyDocument
)
request.body = CreateCentralNetworkPolicyRequestBody(
    central_network_policy_document=centralNetworkPolicyDocumentbody
)
response = client.create_central_network_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

Adding a central network policy

```
package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateCentralNetworkPolicyRequest{}
    var listErInstancesCentralNetworkPolicyDocument = []model.AssociateErInstanceDocument{
        {
            EnterpriseRouterId: "395b0884-aab4-4bf0-8cb8-7f2da26708dd",
            RegionId: "cn-north-4",
            ProjectId: "XXX",
        },
    }
    var listPlanesCentralNetworkPolicyDocument = []model.CentralNetworkPlaneDocument{
        {
            Name: "default-plane",
        },
    }
    centralNetworkPolicyDocumentbody := &model.CentralNetworkPolicyDocument{
        DefaultPlane: "default-plane",
        Planes: listPlanesCentralNetworkPolicyDocument,
    }
```

```

    ErInstances: &listErInstancesCentralNetworkPolicyDocument,
  }
  request.Body = &model.CreateCentralNetworkPolicyRequestBody{
    CentralNetworkPolicyDocument: centralNetworkPolicyDocumentbody,
  }
  response, err := client.CreateCentralNetworkPolicy(request)
  if err == nil {
    fmt.Printf("%+v\n", response)
  } else {
    fmt.Println(err)
  }
}

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
201	The central network policy has been added.

Error Codes

See [Error Codes](#).

4.7.11 Querying the List of Central Network Policies

Function

This API is used to query the central network policies.

Parameters **marker** and **limit** are used for pagination query. The default value of **limit** is **0**. If **marker** is not specified, the first data record is returned.

Calling Method

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

URI

GET /v3/{domain_id}/gcn/central-network/{central_network_id}/policies

Table 4-321 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Parameter	Mandatory	Type	Description
central_network_id	Yes	String	Central network ID. Minimum: 36 Maximum: 36

Table 4-322 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 1000 Minimum: 1 Maximum: 1000 Default: 1000
marker	No	String	Pagination query information. You can obtain the marker values from the response of the last API call. You can enter the marker value of the previous page or the next page. If you enter the marker value of the previous page, the previous page will be queried. If you enter the marker value of the next page, the next page will be queried. During pagination query, the query criteria, including the filters, sorting criteria, and the limit value, cannot be modified. Minimum: 1 Maximum: 4096
sort_key	No	String	Field for sorting. Default: updated_at Minimum: 1 Maximum: 36
sort_dir	No	Object	Whether the resources are sorted in ascending or descending order. asc indicates the ascending order and desc indicates the descending order.

Parameter	Mandatory	Type	Description
id	No	Array	Resource ID. Multiple IDs can be queried. Array Length: 1 - 20
state	No	Array	Policy status. Multiple statuses can be queried. Array Length: 1 - 20
version	No	Array	Version. Multiple versions can be queried. Array Length: 1 - 20
is_applied	No	Boolean	Whether the policy is applied or not.

Request Parameters

Table 4-323 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: **200**

Table 4-324 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
page_info	PageInfo object	Pagination query information.
central_network_policies	Array of CentralNetworkPolicy objects	List of the central network policies. Array Length: 0 - 2000

Table 4-325 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier. Minimum: 1 Maximum: 4096
previous_marker	String	Forward pagination identifier. Minimum: 1 Maximum: 4096
current_count	Integer	Number of the resources in the current list. Minimum: 0 Maximum: 2000

Table 4-326 CentralNetworkPolicy

Parameter	Type	Description
id	String	Resource ID.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
domain_id	String	ID of the account that the instance belongs to.
state	String	Central network policy status. <ul style="list-style-type: none"> • AVAILABLE: The policy is available. • CANCELING: The policy is being cancelled. • APPLYING: The policy is being applied. • FAILED: The operation on the policy failed. • DELETED: The policy is deleted.
central_network_id	String	Central network ID.
document_template_version	String	Document template version. <ul style="list-style-type: none"> • 2022.08.30: August 30, 2022
is_applied	Boolean	Whether the policy is applied or not.
version	Integer	Version of the central network policy. Minimum: 1 Maximum: 4096
document	CentralNetworkPolicyDocument object	Central network policy document.

Table 4-327 CentralNetworkPolicyDocument

Parameter	Type	Description
default_plane	String	Name of the default central network plane. Default: default-plane Minimum: 1 Maximum: 64
planes	Array of CentralNetworkPlaneDocument objects	List of the central network planes. Array Length: 1 - 100
er_instances	Array of AssociateEnterpriseRouterDocument objects	List of the enterprise routers on the central network. Array Length: 1 - 200

Table 4-328 CentralNetworkPlaneDocument

Parameter	Type	Description
name	String	Resource name.
associate_er_tables	Array of AssociateEnterpriseRouterTableDocument objects	List of the enterprise routers on the central network. Array Length: 0 - 100
exclude_er_connections	Array of ExcludeEnterpriseRouterConnectionDocument objects	Whether to exclude the connections to enterprise routers on the central network. Array Length: 0 - 100

Table 4-329 AssociateErTableDocument

Parameter	Type	Description
project_id	String	Project ID.
region_id	String	Region ID.
enterprise_router_id	String	Enterprise router ID.
enterprise_router_table_id	String	Resource ID.

Table 4-330 ExcludeErConnectionDocument

Parameter	Type	Description
[items]	Array of AssociateErInstanceDocument objects	Connections between enterprise routers managed by the central network plane.

Table 4-331 AssociateErInstanceDocument

Parameter	Type	Description
enterprise_router_id	String	Enterprise router ID.
project_id	String	Project ID.
region_id	String	Region ID.

Example Requests

Querying the list of central network policies

```
GET /v3/{domain_id}/gcn/central-network/{central_network_id}/policies
```

Example Responses

Status code: 200

The central network policy list has been queried.

```
{
  "request_id": "76bfd2b0d492d0e479fbbd3981869c12",
  "page_info": {
    "current_count": 1
  },
  "central_network_policies": [ {
    "id": "f03478aa-3975-4ca7-9fb2-b49428a01636",
    "created_at": "2023-10-09T06:22:40.857Z",
    "domain_id": "XXX",
    "state": "AVAILABLE",
    "central_network_id": "e096c86f-817c-418c-945c-6b1d8860a15d",
    "document_template_version": "2022.08.30",
    "is_applied": true,
    "version": 1,
    "document": {
      "default_plane": "default-plane",
      "planes": [ {
        "name": "default-plane",
        "associate_er_tables": [ {
          "project_id": "XXX",
          "region_id": "cn-north-4",
          "enterprise_router_id": "395b0884-aab4-4bf0-8cb8-7f2da26708dd",
          "enterprise_router_table_id": "cc542128-5c2d-402a-8960-53bb2ed9484e"
        } ]
      } ],
    }
  } ],
  "er_instances": [ {
    "enterprise_router_id": "395b0884-aab4-4bf0-8cb8-7f2da26708dd",
```

```
"project_id" : "XXX",
"region_id" : "cn-north-4"
}]
}
}]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListCentralNetworkPoliciesSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ListCentralNetworkPoliciesRequest request = new ListCentralNetworkPoliciesRequest();
        request.withLimit(<limit>);
        request.withMarker("<marker>");
        request.withSortKey("<sort_key>");
        request.withSortDir();
        request.withId();
        request.withState();
        request.withVersion();
        request.withIsApplied(<is_applied>);
        try {
            ListCentralNetworkPoliciesResponse response = client.listCentralNetworkPolicies(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  
  
from huaweicloudsdkcore.auth.credentials import GlobalCredentials  
from huaweicloudsdkcc.v3.region.cc_region import CcRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")  
    sk = __import__('os').getenv("CLOUD_SDK_SK")  
  
    credentials = GlobalCredentials(ak, sk) \  
  
    client = CcClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(CcRegion.value_of("<YOUR REGION>")) \  
        .build()  
  
    try:  
        request = ListCentralNetworkPoliciesRequest()  
        request.limit = <limit>  
        request.marker = "<marker>"  
        request.sort_key = "<sort_key>"  
        request.sort_dir =  
        request.id =  
        request.state =  
        request.version =  
        request.is_applied = <IsApplied>  
        response = client.list_central_network_policies(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/global"  
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")  
  
    auth := global.NewCredentialsBuilder().
```

```

WithAk(ak).
WithSk(sk).
Build()

client := cc.NewCcClient(
    cc.CcClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ListCentralNetworkPoliciesRequest{
    limitRequest:= int32(<limit>)
    request.Limit = &limitRequest
    markerRequest:= "<marker>"
    request.Marker = &markerRequest
    sortKeyRequest:= "<sort_key>"
    request.SortKey = &sortKeyRequest
    isAppliedRequest:= <is_applied>
    request.IsApplied = &isAppliedRequest
    response, err := client.ListCentralNetworkPolicies(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The central network policy list has been queried.

Error Codes

See [Error Codes](#).

4.7.12 Applying a Central Network Policy

Function

This API is used to apply a central network policy.

Calling Method

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

URI

POST /v3/{domain_id}/gcn/central-network/{central_network_id}/policies/{policy_id}/apply

Table 4-332 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
policy_id	Yes	String	Central network policy ID. Minimum: 36 Maximum: 36
central_network_id	Yes	String	Central network ID. Minimum: 36 Maximum: 36

Request Parameters

Table 4-333 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 202

Table 4-334 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
central_network_policy	CentralNetworkPolicy object	Details of the central network policy.
central_network_policy_change_set	Array of CentralNetworkElementChange objects	List of central network policy changes.

Table 4-335 CentralNetworkPolicy

Parameter	Type	Description
id	String	Resource ID.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
domain_id	String	ID of the account that the instance belongs to.
state	String	Central network policy status. <ul style="list-style-type: none"> ● AVAILABLE: The policy is available. ● CANCELING: The policy is being cancelled. ● APPLYING: The policy is being applied. ● FAILED: The operation on the policy failed. ● DELETED: The policy is deleted.
central_network_id	String	Central network ID.
document_template_version	String	Document template version. <ul style="list-style-type: none"> ● 2022.08.30: August 30, 2022
is_applied	Boolean	Whether the policy is applied or not.
version	Integer	Version of the central network policy. Minimum: 1 Maximum: 4096
document	CentralNetworkPolicyDocument object	Central network policy document.

Table 4-336 CentralNetworkPolicyDocument

Parameter	Type	Description
default_plane	String	Name of the default central network plane. Default: default-plane Minimum: 1 Maximum: 64
planes	Array of CentralNetworkPlaneDocument objects	List of the central network planes. Array Length: 1 - 100

Parameter	Type	Description
er_instances	Array of AssociateErInstanceDocument objects	List of the enterprise routers on the central network. Array Length: 1 - 200

Table 4-337 CentralNetworkPlaneDocument

Parameter	Type	Description
name	String	Resource name.
associate_er_tables	Array of AssociateErTableDocument objects	List of the enterprise routers on the central network. Array Length: 0 - 100
exclude_er_connections	Array of ExcludeErConnectionDocument objects	Whether to exclude the connections to enterprise routers on the central network. Array Length: 0 - 100

Table 4-338 AssociateErTableDocument

Parameter	Type	Description
project_id	String	Project ID.
region_id	String	Region ID.
enterprise_router_id	String	Enterprise router ID.
enterprise_router_table_id	String	Resource ID.

Table 4-339 ExcludeErConnectionDocument

Parameter	Type	Description
[items]	Array of AssociateErInstanceDocument objects	Connections between enterprise routers managed by the central network plane.

Table 4-340 AssociateErInstanceDocument

Parameter	Type	Description
enterprise_router_id	String	Enterprise router ID.
project_id	String	Project ID.
region_id	String	Region ID.

Table 4-341 CentralNetworkElementChange

Parameter	Type	Description
operation_id	String	<p>Policy changes.</p> <ul style="list-style-type: none"> • CreateCentralNetworkPlane: adds a central network plane. • DeleteCentralNetworkPlane: removes a central network plane. • UpdateCentralNetworkPlane: updates a central network plane. • CreateCentralNetworkErInstance: adds an enterprise router as an attachment on a central network. • DeleteCentralNetworkErInstance: removes an enterprise router from a central network. • CreateCentralNetworkErConnection: creates a connection between enterprise routers on a central network. • DeleteCentralNetworkErConnection: deletes a connection between enterprise routers from a central network. • CreateCentralNetworkErTable: adds an enterprise router route table as an attachment on a central network. • DeleteCentralNetworkErTable: removes the enterprise router route table from a central network.

Example Requests

Applying a central network policy

```
GET /v3/{domain_id}/gcn/central-network/{central_network_id}/policies
```

Example Responses

Status code: 202

The central network policy has been applied.

```
{
  "request_id": "edb137a2c46c5bda0409833359bb649b",
  "central_network_policy": {
    "id": "ff51f460-4bbe-4385-b2c4-efbe3318076f",
    "created_at": "2023-10-09T07:00:33.663Z",
    "domain_id": "XXX",
    "state": "APPLYING",
    "central_network_id": "e096c86f-817c-418c-945c-6b1d8860a15d",
    "document_template_version": "2022.08.30",
    "is_applied": false,
    "version": 2,
    "document": {
      "default_plane": "default-plane",
      "planes": [ {
        "name": "default-plane",
        "associate_er_tables": [ {
          "project_id": "XXX",
          "region_id": "cn-north-4",
          "enterprise_router_id": "c73b26b7-33f0-438d-b440-8e87dfe6fef9",
          "enterprise_router_table_id": "c0d51f20-0313-40f7-a74e-9dcc5da21c0"
        } ]
      } ],
      "er_instances": [ {
        "enterprise_router_id": "c73b26b7-33f0-438d-b440-8e87dfe6fef9",
        "project_id": "XXX",
        "region_id": "cn-north-4"
      } ]
    }
  },
  "central_network_policy_change_set": [ {
    "operation_id": "UpdateCentralNetworkPlane",
    "original_central_network_plane": {
      "name": "default-plane",
      "is_default": true,
      "associate_er_tables": [ {
        "project_id": "XXX",
        "region_id": "cn-north-4",
        "enterprise_router_id": "395b0884-aab4-4bf0-8cb8-7f2da26708dd",
        "enterprise_router_table_id": "cc542128-5c2d-402a-8960-53bb2ed9484e"
      } ]
    },
    "newest_central_network_plane": {
      "name": "default-plane",
      "is_default": true,
      "associate_er_tables": [ {
        "project_id": "XXX",
        "region_id": "cn-north-4",
        "enterprise_router_id": "c73b26b7-33f0-438d-b440-8e87dfe6fef9",
        "enterprise_router_table_id": "c0d51f20-0313-40f7-a74e-9dcc5da21c0"
      } ]
    }
  } ],
  {
    "operation_id": "CreateCentralNetworkErInstance",
    "create_central_network_er_instance": {
      "enterprise_router_id": "c73b26b7-33f0-438d-b440-8e87dfe6fef9",
      "project_id": "XXX",
      "region_id": "cn-north-4"
    }
  },
  {
    "operation_id": "DeleteCentralNetworkErInstance",
    "delete_central_network_er_instance": {
      "enterprise_router_id": "395b0884-aab4-4bf0-8cb8-7f2da26708dd",
      "project_id": "XXX",
      "region_id": "cn-north-4"
    }
  },
  {
    "operation_id": "CreateCentralNetworkErTable",
    "central_network_plane_name": "default-plane",
  }
}
```

```
"project_id" : "XXX",
"region_id" : "cn-north-4",
"enterprise_router_id" : "c73b26b7-33f0-438d-b440-8e87dfe6fef9",
"enterprise_router_table_id" : "c0d51f20-0313-40f7-a74e-9dccb5da21c0"
}, {
"operation_id" : "DeleteCentralNetworkErTable",
"central_network_plane_name" : "default-plane",
"project_id" : "XXX",
"region_id" : "cn-north-4",
"enterprise_router_id" : "395b0884-aab4-4bf0-8cb8-7f2da26708dd",
"enterprise_router_table_id" : "cc542128-5c2d-402a-8960-53bb2ed9484e"
}
}]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class ApplyCentralNetworkPolicySolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ApplyCentralNetworkPolicyRequest request = new ApplyCentralNetworkPolicyRequest();
        try {
            ApplyCentralNetworkPolicyResponse response = client.applyCentralNetworkPolicy(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ApplyCentralNetworkPolicyRequest()
        response = client.apply_central_network_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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ApplyCentralNetworkPolicyRequest{}
    response, err := client.ApplyCentralNetworkPolicy(request)
```

```

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

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
202	The central network policy has been applied.

Error Codes

See [Error Codes](#).

4.7.13 Deleting a Central Network Policy

Function

This API is used to delete a central network policy. An applied policy cannot be deleted.

Calling Method

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

URI

DELETE /v3/{domain_id}/gcn/central-network/{central_network_id}/policies/{policy_id}

Table 4-342 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
policy_id	Yes	String	Central network policy ID. Minimum: 36 Maximum: 36

Parameter	Mandatory	Type	Description
central_network_id	Yes	String	Central network ID. Minimum: 36 Maximum: 36

Request Parameters

Table 4-343 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: **204**

Table 4-344 Response header parameters

Parameter	Type	Description
x-request-id	-	-

Example Requests

Deleting a central network policy

```
DELETE /v3/{domain_id}/gcn/central-network/{central_network_id}/policies/{policy_id}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class DeleteCentralNetworkPolicySolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteCentralNetworkPolicyRequest request = new DeleteCentralNetworkPolicyRequest();
        try {
            DeleteCentralNetworkPolicyResponse response = client.deleteCentralNetworkPolicy(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
```

```

request = DeleteCentralNetworkPolicyRequest()
response = client.delete_central_network_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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	The central network policy has been deleted.

Error Codes

See [Error Codes](#).

4.7.14 Querying the Changes Between the Current Policy and an Applied Policy

Function

This API is used query the changes between the current policy and an applied policy.

Calling Method

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

URI

GET /v3/{domain_id}/gcn/central-network/{central_network_id}/policies/{policy_id}/change-set

Table 4-345 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
policy_id	Yes	String	Central network policy ID. Minimum: 36 Maximum: 36
central_network_id	Yes	String	Central network ID. Minimum: 36 Maximum: 36

Request Parameters

Table 4-346 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 200

Table 4-347 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
page_info	PageInfo object	Pagination query information.
central_network_policy_change_set	Array of CentralNetworkElementChange objects	List of central network policy changes.

Table 4-348 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier. Minimum: 1 Maximum: 4096
previous_marker	String	Forward pagination identifier. Minimum: 1 Maximum: 4096
current_count	Integer	Number of the resources in the current list. Minimum: 0 Maximum: 2000

Table 4-349 CentralNetworkElementChange

Parameter	Type	Description
operation_id	String	<p>Policy changes.</p> <ul style="list-style-type: none"> • CreateCentralNetworkPlane: adds a central network plane. • DeleteCentralNetworkPlane: removes a central network plane. • UpdateCentralNetworkPlane: updates a central network plane. • CreateCentralNetworkErInstance: adds an enterprise router as an attachment on a central network. • DeleteCentralNetworkErInstance: removes an enterprise router from a central network. • CreateCentralNetworkErConnection: creates a connection between enterprise routers on a central network. • DeleteCentralNetworkErConnection: deletes a connection between enterprise routers from a central network. • CreateCentralNetworkErTable: adds an enterprise router route table as an attachment on a central network. • DeleteCentralNetworkErTable: removes the enterprise router route table from a central network.

Example Requests

Querying the changes between the current policy and an applied policy

```
GET /v3/{domain_id}/gcn/central-network/{central_network_id}/policies/{policy_id}/change-set
```

Example Responses

Status code: 200

Changes between the current policy and applied policy have been queried.

```
{
  "request_id" : "a334adc3e2cba87855def6f3ab58b9db5",
  "page_info" : {
    "current_count" : 5
  },
  "central_network_policy_change_set" : [ {
    "operation_id" : "UpdateCentralNetworkPlane",
    "original_central_network_plane" : {
      "name" : "default-plane",
      "is_default" : true,
      "associate_er_tables" : [ {
        "project_id" : "XXX",
```



```

    "region_id" : "cn-north-4",
    "enterprise_router_id" : "395b0884-aab4-4bf0-8cb8-7f2da26708dd",
    "enterprise_router_table_id" : "cc542128-5c2d-402a-8960-53bb2ed9484e"
  } ]
},
"newest_central_network_plane" : {
  "name" : "default-plane",
  "is_default" : true,
  "associate_er_tables" : [ {
    "project_id" : "XXX",
    "region_id" : "cn-north-4",
    "enterprise_router_id" : "c73b26b7-33f0-438d-b440-8e87dfe6fef9",
    "enterprise_router_table_id" : "c0d51f20-0313-40f7-a74e-9dccb5da21c0"
  } ]
}
}, {
  "operation_id" : "CreateCentralNetworkErInstance",
  "create_central_network_er_instance" : {
    "enterprise_router_id" : "c73b26b7-33f0-438d-b440-8e87dfe6fef9",
    "project_id" : "XXX",
    "region_id" : "cn-north-4"
  }
}, {
  "operation_id" : "DeleteCentralNetworkErInstance",
  "delete_central_network_er_instance" : {
    "enterprise_router_id" : "395b0884-aab4-4bf0-8cb8-7f2da26708dd",
    "project_id" : "XXX",
    "region_id" : "cn-north-4"
  }
}, {
  "operation_id" : "CreateCentralNetworkErTable",
  "central_network_plane_name" : "default-plane",
  "project_id" : "XXX",
  "region_id" : "cn-north-4",
  "enterprise_router_id" : "c73b26b7-33f0-438d-b440-8e87dfe6fef9",
  "enterprise_router_table_id" : "c0d51f20-0313-40f7-a74e-9dccb5da21c0"
}, {
  "operation_id" : "DeleteCentralNetworkErTable",
  "central_network_plane_name" : "default-plane",
  "project_id" : "XXX",
  "region_id" : "cn-north-4",
  "enterprise_router_id" : "395b0884-aab4-4bf0-8cb8-7f2da26708dd",
  "enterprise_router_table_id" : "cc542128-5c2d-402a-8960-53bb2ed9484e"
} ]
}

```

Status Codes

Status Code	Description
200	Changes between the current policy and applied policy have been queried.

Error Codes

See [Error Codes](#).

4.8 Central Network Attachments

4.8.1 Adding a Global DC Gateway to a Central Network

Function

This API is used to add a global DC gateway to a central network as an attachment.

Calling Method

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

URI

POST /v3/{domain_id}/gcn/central-network/{central_network_id}/gdgw-attachments

Table 4-350 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
central_network_id	Yes	String	Central network ID. Minimum: 36 Maximum: 36

Request Parameters

Table 4-351 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-352 Request body parameters

Parameter	Mandatory	Type	Description
central_network_gdgw_attachment	Yes	CreateCentralNetworkGdgwAttachment object	Request body for adding a global DC gateway to a central network as an attachment.

Table 4-353 CreateCentralNetworkGdgwAttachment

Parameter	Mandatory	Type	Description
name	Yes	String	Resource name.
description	No	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
enterprise_router_id	Yes	String	Enterprise router ID.
global_dc_gateway_id	Yes	String	Resource ID.
enterprise_router_project_id	Yes	String	Project ID of the enterprise router.
enterprise_router_region_id	Yes	String	Region ID of the enterprise router.
global_dc_gateway_project_id	Yes	String	Project ID.
global_dc_gateway_region_id	Yes	String	Region ID.
central_network_plane_id	No	String	Resource ID.

Response Parameters

Status code: 202

Table 4-354 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
central_network_gdgw_attachment	CentralNetworkGdgwAttachment object	Details of the global DC gateway used as an attachment.

Table 4-355 CentralNetworkGdgwAttachment

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
state	String	Central network connection status. <ul style="list-style-type: none"> ● AVAILABLE: The connection is available. ● CREATING: The connection is being created. ● UPDATING: The connection is being updated. ● DELETING: The connection is being deleted. ● FREEZING: The connection is being frozen. ● UNFREEZING: The connection is being unfrozen. ● RECOVERING: The connection is being recovered. ● FAILED: The operation on the connection failed. ● DELETED: The connection is deleted. ● APPROVING: The connection is being approved. ● APPROVED: The connection is approved. ● UNAPPROVED: The approval failed.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
central_network_id	String	Central network ID.
central_network_plane_id	String	ID of the central network plane.
global_connection_bandwidth_id	String	Global connection bandwidth ID.

Parameter	Type	Description
bandwidth_type	String	Bandwidth type. The bandwidth types are as follows: <ul style="list-style-type: none"> • BandwidthPackage: A global private bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global private bandwidth. • TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.
bandwidth_size	Integer	Bandwidth range, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.
enterprise_router_id	String	Enterprise router ID.
enterprise_router_project_id	String	Project ID of the enterprise router.
enterprise_router_region_id	String	Region ID of the enterprise router.
enterprise_router_attachment_id	String	Attachment ID of the enterprise router.
global_dc_gateway_peer_link_id	String	Resource ID.
global_dc_gateway_id	String	Resource ID.
global_dc_gateway_project_id	String	Project ID.
global_dc_gateway_region_id	String	Region ID.
enterprise_router_site_code	String	Site code definition.
global_dc_gateway_site_code	String	Site code definition.

Example Requests

Adding a global DC gateway to a central network

```
POST /v3/{domain_id}/gcn/central-network/{central_network_id}/gdgw-attachments

{
  "central_network_gdgw_attachment": {
    "name": "name",
    "description": "description",
    "enterprise_router_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "global_dc_gateway_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "enterprise_router_project_id": "32f7402e18154ce5861c9989df956394",
    "enterprise_router_region_id": "cn-north-4",
    "global_dc_gateway_project_id": "32f7402e18154ce5861c9989df956394",
    "global_dc_gateway_region_id": "cn-north-4",
    "central_network_plane_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b"
  }
}
```

Example Responses

Status code: 202

The global DC gateway has been added as an attachment on the central network.

```
{
  "request_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "central_network_gdgw_attachment": {
    "id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "name": "name",
    "description": "description",
    "domain_id": "XXX",
    "state": "AVAILABLE",
    "created_at": "2023-10-09T10:09:28.908Z",
    "updated_at": "2023-10-09T10:09:28.908Z",
    "central_network_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "central_network_plane_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "global_connection_bandwidth_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "bandwidth_type": "BandwidthPackage",
    "bandwidth_size": 20,
    "is_frozen": false,
    "enterprise_router_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "enterprise_router_project_id": "XXX",
    "enterprise_router_region_id": "cn-north-4",
    "enterprise_router_attachment_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "global_dc_gateway_peer_link_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "global_dc_gateway_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "global_dc_gateway_project_id": "XXX",
    "global_dc_gateway_region_id": "cn-north-4",
    "enterprise_router_site_code": "cn-north-bj4",
    "global_dc_gateway_site_code": "cn-north-bj4"
  }
}
```

Status Codes

Status Code	Description
202	The global DC gateway has been added as an attachment on the central network.

Error Codes

See [Error Codes](#).

4.8.2 Querying the List of Global DC Gateways on a Central Network

Function

This API is used to query the list of global DC gateways on a central network.

Parameters **marker** and **limit** are used for pagination query. The default value of **limit** is **0**. If **marker** is not specified, the first data record is returned.

Calling Method

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

URI

GET /v3/{domain_id}/gcn/central-network/{central_network_id}/gdgw-attachments

Table 4-356 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
central_network_id	Yes	String	Central network ID. Minimum: 36 Maximum: 36

Table 4-357 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 1000 Minimum: 1 Maximum: 1000 Default: 1000

Parameter	Mandatory	Type	Description
marker	No	String	Pagination query information. You can obtain the marker values from the response of the last API call. You can enter the marker value of the previous page or the next page. If you enter the marker value of the previous page, the previous page will be queried. If you enter the marker value of the next page, the next page will be queried. During pagination query, the query criteria, including the filters, sorting criteria, and the limit value, cannot be modified. Minimum: 1 Maximum: 4096
sort_key	No	String	Field for sorting. Default: updated_at Minimum: 1 Maximum: 36
sort_dir	No	Object	Whether the resources are sorted in ascending or descending order. asc indicates the ascending order and desc indicates the descending order.
id	No	Array	Resource ID. Multiple IDs can be queried. Array Length: 1 - 20
name	No	Array	Resource name. Multiple names can be queried. Array Length: 1 - 20
state	No	Array	Central network connection status. Multiple statuses can be queried. Array Length: 1 - 20
global_dc_gateway_id	No	Array	Global DC gateway IDs. Array Length: 1 - 10

Request Parameters

Table 4-358 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: **200**

Table 4-359 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
page_info	PageInfo object	Pagination query information.
central_network_gdgw_attachments	Array of CentralNetworkGdgwAttachment objects	List of the global DC gateways on the central network. Array Length: 0 - 2000

Table 4-360 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier. Minimum: 1 Maximum: 4096
previous_marker	String	Forward pagination identifier. Minimum: 1 Maximum: 4096
current_count	Integer	Number of the resources in the current list. Minimum: 0 Maximum: 2000

Table 4-361 CentralNetworkGdgwAttachment

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
state	String	Central network connection status. <ul style="list-style-type: none"> ● AVAILABLE: The connection is available. ● CREATING: The connection is being created. ● UPDATING: The connection is being updated. ● DELETING: The connection is being deleted. ● FREEZING: The connection is being frozen. ● UNFREEZING: The connection is being unfrozen. ● RECOVERING: The connection is being recovered. ● FAILED: The operation on the connection failed. ● DELETED: The connection is deleted. ● APPROVING: The connection is being approved. ● APPROVED: The connection is approved. ● UNAPPROVED: The approval failed.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
central_network_id	String	Central network ID.
central_network_plane_id	String	ID of the central network plane.
global_connection_bandwidth_id	String	Global connection bandwidth ID.

Parameter	Type	Description
bandwidth_type	String	Bandwidth type. The bandwidth types are as follows: <ul style="list-style-type: none"> • BandwidthPackage: A global private bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global private bandwidth. • TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.
bandwidth_size	Integer	Bandwidth range, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.
enterprise_router_id	String	Enterprise router ID.
enterprise_router_project_id	String	Project ID of the enterprise router.
enterprise_router_region_id	String	Region ID of the enterprise router.
enterprise_router_attachment_id	String	Attachment ID of the enterprise router.
global_dc_gateway_peer_link_id	String	Resource ID.
global_dc_gateway_id	String	Resource ID.
global_dc_gateway_project_id	String	Project ID.
global_dc_gateway_region_id	String	Region ID.
enterprise_router_site_code	String	Site code definition.
global_dc_gateway_site_code	String	Site code definition.

Example Requests

Querying the list of global DC gateways on a central network

```
GET /v3/{domain_id}/gcn/central-network/{central_network_id}/gdgw-attachments
```

Example Responses

Status code: 200

The list of global DC gateways on the central network has been queried.

```
{
  "request_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "page_info": {
    "next_marker": "8EDF12u71N...",
    "previous_marker": "8EDF12u71N...",
    "current_count": 1
  },
  "central_network_gdgw_attachments": [ {
    "id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "name": "name",
    "description": "description",
    "domain_id": "XXX",
    "state": "AVAILABLE",
    "created_at": "2023-10-09T10:11:11.222Z",
    "updated_at": "2023-10-09T10:11:11.222Z",
    "central_network_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "central_network_plane_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "global_connection_bandwidth_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "bandwidth_type": "BandwidthPackage",
    "bandwidth_size": 20,
    "is_frozen": false,
    "enterprise_router_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "enterprise_router_project_id": "XXX",
    "enterprise_router_region_id": "cn-north-4",
    "enterprise_router_attachment_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "global_dc_gateway_peer_link_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "global_dc_gateway_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "global_dc_gateway_project_id": "XXX",
    "global_dc_gateway_region_id": "cn-north-4",
    "enterprise_router_site_code": "cn-north-bj4",
    "global_dc_gateway_site_code": "cn-north-bj4"
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;
```

```
public class ListCentralNetworkGdgwAttachmentsSolution {  
    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");  
  
        ICredential auth = new GlobalCredentials()  
            .withAk(ak)  
            .withSk(sk);  
  
        CcClient client = CcClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ListCentralNetworkGdgwAttachmentsRequest request = new  
ListCentralNetworkGdgwAttachmentsRequest();  
        request.withLimit(<limit>);  
        request.withMarker("<marker>");  
        request.withSortKey("<sort_key>");  
        request.withSortDir();  
        request.withId();  
        request.withName();  
        request.withState();  
        request.withGlobalDcGatewayId();  
        try {  
            ListCentralNetworkGdgwAttachmentsResponse response =  
client.listCentralNetworkGdgwAttachments(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  
  
from huaweicloudsdkcore.auth.credentials import GlobalCredentials  
from huaweicloudsdkcc.v3.region.cc_region import CcRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")  
    sk = __import__('os').getenv("CLOUD_SDK_SK")  
  
    credentials = GlobalCredentials(ak, sk) \  
  
    client = CcClient.new_builder() \  
        .with_credentials(credentials) \  

```

```
.with_region(CcRegion.value_of("<YOUR REGION>")) \
.build()

try:
    request = ListCentralNetworkGdgwAttachmentsRequest()
    request.limit = <limit>
    request.marker = "<marker>"
    request.sort_key = "<sort_key>"
    request.sort_dir =
    request.id =
    request.name =
    request.state =
    request.global_dc_gateway_id =
    response = client.list_central_network_gdgw_attachments(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListCentralNetworkGdgwAttachmentsRequest{}
    limitRequest := int32(<limit>)
    request.Limit = &limitRequest
    markerRequest := "<marker>"
    request.Marker = &markerRequest
    sortKeyRequest := "<sort_key>"
    request.SortKey = &sortKeyRequest
    response, err := client.ListCentralNetworkGdgwAttachments(request)
    if err == nil {
        fmt.Printf("%v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The list of global DC gateways on the central network has been queried.

Error Codes

See [Error Codes](#).

4.8.3 Adding a Route Table of an Enterprise Router as an Attachment on a Central Network

Function

This API is used to add a route table of an enterprise router as an attachment on a central network.

Calling Method

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

URI

POST /v3/{domain_id}/gcn/central-network/{central_network_id}/er-route-table-attachments

Table 4-362 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
central_network_id	Yes	String	Central network ID. Minimum: 36 Maximum: 36

Request Parameters

Table 4-363 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-364 Request body parameters

Parameter	Mandatory	Type	Description
central_network_er_route_table_attachment	Yes	CreateCentralNetworkErRouteTableAttachment object	Request body for adding an enterprise router to a central network as an attachment.

Table 4-365 CreateCentralNetworkErRouteTableAttachment

Parameter	Mandatory	Type	Description
name	Yes	String	Resource name.
description	No	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
enterprise_router_id	Yes	String	Enterprise router ID.
enterprise_router_project_id	Yes	String	Project ID of the enterprise router.
enterprise_router_region_id	Yes	String	Region ID of the enterprise router.
attachment_id	No	String	Resource ID.
enterprise_router_table_id	Yes	String	Resource ID.
attached_enterprise_router_table_project_id	Yes	String	Project ID.

Parameter	Mandatory	Type	Description
attached_er_table_region_id	Yes	String	Region ID.
attached_er_id	Yes	String	Resource ID.
attached_er_table_id	Yes	String	Resource ID.
central_network_plane_id	Yes	String	Resource ID.
hosted_cloud	Yes	String	<ul style="list-style-type: none"> • HWCloud: Huawei Cloud • Ireland: Ireland site Default: HWCloud

Response Parameters

Status code: 202

Table 4-366 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
central_network_er_route_table_attachment	CentralNetworkErRouteTableAttachment object	Details of the enterprise router route table used as an attachment.

Table 4-367 CentralNetworkErRouteTableAttachment

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.

Parameter	Type	Description
state	String	Central network connection status. <ul style="list-style-type: none"> ● AVAILABLE: The connection is available. ● CREATING: The connection is being created. ● UPDATING: The connection is being updated. ● DELETING: The connection is being deleted. ● FREEZING: The connection is being frozen. ● UNFREEZING: The connection is being unfrozen. ● RECOVERING: The connection is being recovered. ● FAILED: The operation on the connection failed. ● DELETED: The connection is deleted. ● APPROVING: The connection is being approved. ● APPROVED: The connection is approved. ● UNAPPROVED: The approval failed.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
central_network_id	String	Central network ID.
central_network_plane_id	String	ID of the central network plane.
global_connection_bandwidth_id	String	Global connection bandwidth ID.
is_frozen	Boolean	Whether the resource is frozen.
bandwidth_type	String	Bandwidth type. The bandwidth types are as follows: <ul style="list-style-type: none"> ● BandwidthPackage: A global private bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global private bandwidth. ● TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.

Parameter	Type	Description
bandwidth_size	Integer	Bandwidth range, in Mbit/s.
enterprise_router_id	String	Enterprise router ID.
enterprise_router_project_id	String	Project ID of the enterprise router.
enterprise_router_region_id	String	Region ID of the enterprise router.
enterprise_router_attachment_id	String	Attachment ID of the enterprise router.
enterprise_router_table_id	String	Resource ID.
enterprise_router_site_code	String	Site code definition.
attached_er_table_id	String	Resource ID.
attached_er_table_region_id	String	Region ID.
attached_er_table_project_id	String	Project ID.
attached_er_table_site_code	String	Site code definition.
attached_er_id	String	Resource ID.
attached_er_attachment_id	String	Resource ID.
approved_status	String	Approval status. <ul style="list-style-type: none"> ● APPROVING: Approving ● APPROVED: Approved ● UNAPPROVED: Approval failed
hosted_cloud	String	Huawei Cloud or partner cloud. <ul style="list-style-type: none"> ● HWCloud: Huawei Cloud ● Ireland: partner cloud in Ireland

Parameter	Type	Description
reason	String	Reason for rejecting an enterprise router route table as an attachment. Minimum: 0 Maximum: 1024

Example Requests

Adding a route table of an enterprise router as an attachment on a central network

```
POST /v3/{domain_id}/gcn/central-network/{central_network_id}/er-route-table-attachments
```

```
{
  "central_network_er_route_table_attachment" : {
    "name" : "name",
    "description" : "description",
    "enterprise_router_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "enterprise_router_project_id" : "32f7402e18154ce5861c9989df956394",
    "enterprise_router_region_id" : "cn-north-4",
    "enterprise_router_table_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "attached_er_table_project_id" : "32f7402e18154ce5861c9989df956394",
    "attached_er_table_region_id" : "cn-north-4",
    "attached_er_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "attached_er_table_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "central_network_plane_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "hosted_cloud" : "HWCloud"
  }
}
```

Example Responses

Status code: 202

The route table has been added as an attachment on the central network.

```
{
  "request_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "central_network_er_route_table_attachment" : {
    "id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "name" : "name",
    "description" : "description",
    "domain_id" : "XXX",
    "state" : "AVAILABLE",
    "created_at" : "2023-10-09T10:09:28.908Z",
    "updated_at" : "2023-10-09T10:09:28.908Z",
    "central_network_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "central_network_plane_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "global_connection_bandwidth_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "bandwidth_type" : "BandwidthPackage",
    "bandwidth_size" : 20,
    "is_frozen" : false,
    "enterprise_router_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "enterprise_router_project_id" : "XXX",
    "enterprise_router_region_id" : "cn-north-4",
    "enterprise_router_attachment_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "enterprise_router_table_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "enterprise_router_site_code" : "cn-north-bj4",
    "attached_er_table_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "attached_er_table_region_id" : "cn-north-4",
    "attached_er_table_project_id" : "XXX",
  }
}
```

```
"attached_er_table_site_code" : "cn-north-bj4",
"attached_er_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
"attached_er_attachment_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
"approved_state" : "APPROVING",
"hosted_cloud" : "HWCloud",
"reason" : "APPROVING"
}
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Adding a route table of an enterprise router as an attachment on a central network

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class CreateCentralNetworkErRouteTableAttachmentSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateCentralNetworkErRouteTableAttachmentRequest request = new
        CreateCentralNetworkErRouteTableAttachmentRequest();
        CreateCentralNetworkErRouteTableAttachmentsRequestBody body = new
        CreateCentralNetworkErRouteTableAttachmentsRequestBody();
        CreateCentralNetworkErRouteTableAttachment centralNetworkErRouteTableAttachmentbody = new
        CreateCentralNetworkErRouteTableAttachment();

        centralNetworkErRouteTableAttachmentbody.withHostedCloud(CreateCentralNetworkErRouteTableAttachme
        nt.HostedCloudEnum.fromValue("HWCloud"))
            .withEnterpriseRouterId("a3bad420-33b8-4e26-9e9b-bdf67aa8e72b")
            .withEnterpriseRouterProjectId("32f7402e18154ce5861c9989df956394")
            .withEnterpriseRouterRegionId("cn-north-4")
            .withDescription("description")
            .withEnterpriseRouterTableId("a3bad420-33b8-4e26-9e9b-bdf67aa8e72b")
            .withCentralNetworkPlaneId("a3bad420-33b8-4e26-9e9b-bdf67aa8e72b")
            .withName("name")
            .withAttachedErTableRegionId("cn-north-4")
            .withAttachedErTableId("a3bad420-33b8-4e26-9e9b-bdf67aa8e72b")
    }
}
```

```
.withAttachedErTableProjectId("32f7402e18154ce5861c9989df956394")
.withAttachedErId("a3bad420-33b8-4e26-9e9b-bdf67aa8e72b");
body.withCentralNetworkErRouteTableAttachment(centralNetworkErRouteTableAttachmentbody);
request.withBody(body);
try {
    CreateCentralNetworkErRouteTableAttachmentResponse response =
client.createCentralNetworkErRouteTableAttachment(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

Adding a route table of an enterprise router as an attachment on a central network

```
# coding: utf-8
```

```
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")
```

```
    credentials = GlobalCredentials(ak, sk) \
```

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

```
    try:
```

```
        request = CreateCentralNetworkErRouteTableAttachmentRequest()
        centralNetworkErRouteTableAttachmentbody = CreateCentralNetworkErRouteTableAttachment(
            hosted_cloud="HWCloud",
            enterprise_router_id="a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
            enterprise_router_project_id="32f7402e18154ce5861c9989df956394",
            enterprise_router_region_id="cn-north-4",
            description="description",
            enterprise_router_table_id="a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
            central_network_plane_id="a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
            name="name",
            attached_er_table_region_id="cn-north-4",
            attached_er_table_id="a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
            attached_er_table_project_id="32f7402e18154ce5861c9989df956394",
            attached_er_id="a3bad420-33b8-4e26-9e9b-bdf67aa8e72b"
        )
```

```
        request.body = CreateCentralNetworkErRouteTableAttachmentsRequestBody(
            central_network_er_route_table_attachment=centralNetworkErRouteTableAttachmentbody
        )
```

```
response = client.create_central_network_er_route_table_attachment(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

Adding a route table of an enterprise router as an attachment on a central network

```
package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateCentralNetworkErRouteTableAttachmentRequest{
        descriptionCentralNetworkErRouteTableAttachment:= "description"
        centralNetworkErRouteTableAttachmentbody := &model.CreateCentralNetworkErRouteTableAttachment{
            HostedCloud:
                model.GetCreateCentralNetworkErRouteTableAttachmentHostedCloudEnum().HW_CLOUD,
            EnterpriseRouterId: "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
            EnterpriseRouterProjectId: "32f7402e18154ce5861c9989df956394",
            EnterpriseRouterRegionId: "cn-north-4",
            Description: &descriptionCentralNetworkErRouteTableAttachment,
            EnterpriseRouterTableId: "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
            CentralNetworkPlaneId: "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
            Name: "name",
            AttachedErTableRegionId: "cn-north-4",
            AttachedErTableId: "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
            AttachedErTableProjectId: "32f7402e18154ce5861c9989df956394",
            AttachedErId: "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
        }
    }
    request.Body = &model.CreateCentralNetworkErRouteTableAttachmentsRequestBody{
        CentralNetworkErRouteTableAttachment: centralNetworkErRouteTableAttachmentbody,
    }
    response, err := client.CreateCentralNetworkErRouteTableAttachment(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

```
}  
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
202	The route table has been added as an attachment on the central network.

Error Codes

See [Error Codes](#).

4.8.4 Querying the List of Enterprise Router Route Tables on a Central Network

Function

This API is used to query the list of enterprise router route tables as attachments on a central network.

Parameters **marker** and **limit** are used for pagination query. The default value of **limit** is **0**. If **marker** is not specified, the first data record is returned.

Calling Method

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

URI

GET /v3/{domain_id}/gcn/central-network/{central_network_id}/er-route-table-attachments

Table 4-368 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Parameter	Mandatory	Type	Description
central_network_id	Yes	String	Central network ID. Minimum: 36 Maximum: 36

Table 4-369 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 1000 Minimum: 1 Maximum: 1000 Default: 1000
marker	No	String	Pagination query information. You can obtain the marker values from the response of the last API call. You can enter the marker value of the previous page or the next page. If you enter the marker value of the previous page, the previous page will be queried. If you enter the marker value of the next page, the next page will be queried. During pagination query, the query criteria, including the filters, sorting criteria, and the limit value, cannot be modified. Minimum: 1 Maximum: 4096
sort_key	No	String	Field for sorting. Default: updated_at Minimum: 1 Maximum: 36
sort_dir	No	Object	Whether the resources are sorted in ascending or descending order. asc indicates the ascending order and desc indicates the descending order.

Parameter	Mandatory	Type	Description
id	No	Array	Resource ID. Multiple IDs can be queried. Array Length: 1 - 20
name	No	Array	Resource name. Multiple names can be queried. Array Length: 1 - 20
state	No	Array	Central network connection status. Multiple statuses can be queried. Array Length: 1 - 20
attachment_instance_id	No	Array	Attachment ID. Array Length: 1 - 10

Request Parameters

Table 4-370 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 200

Table 4-371 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
page_info	PageInfo object	Pagination query information.
central_network_er_route_table_attachments	Array of CentralNetworkErRouteTableAttachment objects	Response body for adding an enterprise router route table as an attachment. Array Length: 0 - 200

Table 4-372 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier. Minimum: 1 Maximum: 4096
previous_mar ker	String	Forward pagination identifier. Minimum: 1 Maximum: 4096
current_count	Integer	Number of the resources in the current list. Minimum: 0 Maximum: 2000

Table 4-373 CentralNetworkErRouteTableAttachment

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.

Parameter	Type	Description
state	String	<p>Central network connection status.</p> <ul style="list-style-type: none"> ● AVAILABLE: The connection is available. ● CREATING: The connection is being created. ● UPDATING: The connection is being updated. ● DELETING: The connection is being deleted. ● FREEZING: The connection is being frozen. ● UNFREEZING: The connection is being unfrozen. ● RECOVERING: The connection is being recovered. ● FAILED: The operation on the connection failed. ● DELETED: The connection is deleted. ● APPROVING: The connection is being approved. ● APPROVED: The connection is approved. ● UNAPPROVED: The approval failed.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
central_network_id	String	Central network ID.
central_network_plane_id	String	ID of the central network plane.
global_connection_bandwidth_id	String	Global connection bandwidth ID.
is_frozen	Boolean	Whether the resource is frozen.
bandwidth_type	String	<p>Bandwidth type. The bandwidth types are as follows:</p> <ul style="list-style-type: none"> ● BandwidthPackage: A global private bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global private bandwidth. ● TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.

Parameter	Type	Description
bandwidth_size	Integer	Bandwidth range, in Mbit/s.
enterprise_router_id	String	Enterprise router ID.
enterprise_router_project_id	String	Project ID of the enterprise router.
enterprise_router_region_id	String	Region ID of the enterprise router.
enterprise_router_attachment_id	String	Attachment ID of the enterprise router.
enterprise_router_table_id	String	Resource ID.
enterprise_router_site_code	String	Site code definition.
attached_er_table_id	String	Resource ID.
attached_er_table_region_id	String	Region ID.
attached_er_table_project_id	String	Project ID.
attached_er_table_site_code	String	Site code definition.
attached_er_id	String	Resource ID.
attached_er_attachment_id	String	Resource ID.
approved_status	String	Approval status. <ul style="list-style-type: none"> ● APPROVING: Approving ● APPROVED: Approved ● UNAPPROVED: Approval failed
hosted_cloud	String	Huawei Cloud or partner cloud. <ul style="list-style-type: none"> ● HWCloud: Huawei Cloud ● Ireland: partner cloud in Ireland

Parameter	Type	Description
reason	String	Reason for rejecting an enterprise router route table as an attachment. Minimum: 0 Maximum: 1024

Example Requests

Querying the list of enterprise router route tables as attachments on a central network

```
GET /v3/{domain_id}/gcn/central-network/{central_network_id}/er-route-table-attachments
```

Example Responses

Status code: 200

The list of enterprise router route tables on the central network has been queried.

```
{
  "request_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "central_network_er_route_table_attachments": [ {
    "id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "name": "name",
    "description": "description",
    "domain_id": "XXX",
    "state": "AVAILABLE",
    "created_at": "2023-10-09T10:09:28.908Z",
    "updated_at": "2023-10-09T10:09:28.908Z",
    "central_network_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "central_network_plane_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "global_connection_bandwidth_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "bandwidth_type": "BandwidthPackage",
    "bandwidth_size": 20,
    "is_frozen": false,
    "enterprise_router_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "enterprise_router_project_id": "XXX",
    "enterprise_router_region_id": "cn-north-4",
    "enterprise_router_attachment_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "enterprise_router_table_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "enterprise_router_site_code": "cn-north-bj4",
    "attached_er_table_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "attached_er_table_region_id": "cn-north-4",
    "attached_er_table_project_id": "XXX",
    "attached_er_table_site_code": "cn-north-bj4",
    "attached_er_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "attached_er_attachment_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "approved_state": "APPROVING",
    "hosted_cloud": "HWCloud",
    "reason": "APPROVING"
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListCentralNetworkErRouteTableAttachmentsSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ListCentralNetworkErRouteTableAttachmentsRequest request = new
        ListCentralNetworkErRouteTableAttachmentsRequest();
        request.withLimit("<limit>");
        request.withMarker("<marker>");
        request.withSortKey("<sort_key>");
        request.withSortDir();
        request.withId();
        request.withName();
        request.withState();
        request.withAttachmentInstanceId();
        try {
            ListCentralNetworkErRouteTableAttachmentsResponse response =
            client.listCentralNetworkErRouteTableAttachments(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
```

```
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ListCentralNetworkErRouteTableAttachmentsRequest()
        request.limit = <limit>
        request.marker = "<marker>"
        request.sort_key = "<sort_key>"
        request.sort_dir =
        request.id =
        request.name =
        request.state =
        request.attachment_instance_id =
        response = client.list_central_network_er_route_table_attachments(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())
```



```

request := &model.ListCentralNetworkErRouteTableAttachmentsRequest{}
limitRequest:= int32(<limit>)
request.Limit = &limitRequest
markerRequest:= "<marker>"
request.Marker = &markerRequest
sortKeyRequest:= "<sort_key>"
request.SortKey = &sortKeyRequest
response, err := client.ListCentralNetworkErRouteTableAttachments(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The list of enterprise router route tables on the central network has been queried.

Error Codes

See [Error Codes](#).

4.8.5 Querying an Enterprise Router Route Table on a Central Network

Function

This API is used to query the details of an enterprise router route table on a central network.

Calling Method

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

URI

GET /v3/{domain_id}/gcn/central-network/{central_network_id}/er-route-table-attachments/{er_route_table_attachment_id}

Table 4-374 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
central_network_id	Yes	String	Central network ID. Minimum: 36 Maximum: 36
er_route_table_attachment_id	Yes	String	ID of the enterprise router route table attachment on the central network. Minimum: 36 Maximum: 36

Request Parameters

Table 4-375 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 200

Table 4-376 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
central_network_er_route_table_attachment	CentralNetworkErRouteTableAttachment object	Details of the enterprise router route table used as an attachment.

Table 4-377 CentralNetworkErRouteTableAttachment

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
state	String	Central network connection status. <ul style="list-style-type: none"> ● AVAILABLE: The connection is available. ● CREATING: The connection is being created. ● UPDATING: The connection is being updated. ● DELETING: The connection is being deleted. ● FREEZING: The connection is being frozen. ● UNFREEZING: The connection is being unfrozen. ● RECOVERING: The connection is being recovered. ● FAILED: The operation on the connection failed. ● DELETED: The connection is deleted. ● APPROVING: The connection is being approved. ● APPROVED: The connection is approved. ● UNAPPROVED: The approval failed.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
central_network_id	String	Central network ID.
central_network_plane_id	String	ID of the central network plane.
global_connection_bandwidth_id	String	Global connection bandwidth ID.
is_frozen	Boolean	Whether the resource is frozen.

Parameter	Type	Description
bandwidth_type	String	Bandwidth type. The bandwidth types are as follows: <ul style="list-style-type: none"> • BandwidthPackage: A global private bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global private bandwidth. • TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.
bandwidth_size	Integer	Bandwidth range, in Mbit/s.
enterprise_router_id	String	Enterprise router ID.
enterprise_router_project_id	String	Project ID of the enterprise router.
enterprise_router_region_id	String	Region ID of the enterprise router.
enterprise_router_attachment_id	String	Attachment ID of the enterprise router.
enterprise_router_table_id	String	Resource ID.
enterprise_router_site_code	String	Site code definition.
attached_ertable_id	String	Resource ID.
attached_ertable_region_id	String	Region ID.
attached_ertable_project_id	String	Project ID.
attached_ertable_site_code	String	Site code definition.
attached_ertable_id	String	Resource ID.
attached_ertable_attachment_id	String	Resource ID.

Parameter	Type	Description
approved_status	String	Approval status. <ul style="list-style-type: none">● APPROVING: Approving● APPROVED: Approved● UNAPPROVED: Approval failed
hosted_cloud	String	Huawei Cloud or partner cloud. <ul style="list-style-type: none">● HWCloud: Huawei Cloud● Ireland: partner cloud in Ireland
reason	String	Reason for rejecting an enterprise router route table as an attachment. Minimum: 0 Maximum: 1024

Example Requests

Querying the details of an enterprise router route table on a central network

```
GET /v3/{domain_id}/gcn/central-network/{central_network_id}/er-route-table-attachments/{er_route_table_attachment_id}
```

Example Responses

Status code: 200

The details of the enterprise router route table on the central network have been queried.

```
{
  "request_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "central_network_er_route_table_attachment": {
    "id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "name": "name",
    "description": "description",
    "domain_id": "XXX",
    "state": "AVAILABLE",
    "created_at": "2023-10-09T10:09:28.908Z",
    "updated_at": "2023-10-09T10:09:28.908Z",
    "central_network_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "central_network_plane_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "global_connection_bandwidth_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "bandwidth_type": "BandwidthPackage",
    "bandwidth_size": 20,
    "is_frozen": false,
    "enterprise_router_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "enterprise_router_project_id": "XXX",
    "enterprise_router_region_id": "cn-north-4",
    "enterprise_router_attachment_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "enterprise_router_table_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "enterprise_router_site_code": "cn-north-bj4",
    "attached_er_table_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "attached_er_table_region_id": "cn-north-4",
    "attached_er_table_project_id": "XXX",
    "attached_er_table_site_code": "cn-north-bj4",
    "attached_er_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "attached_er_attachment_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  }
}
```

```
"approved_state" : "APPROVING",  
"hosted_cloud" : "HWCloud",  
"reason" : "APPROVING"  
}  
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.GlobalCredentials;  
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.cc.v3.region.CcRegion;  
import com.huaweicloud.sdk.cc.v3.*;  
import com.huaweicloud.sdk.cc.v3.model.*;  
  
public class ShowCentralNetworkErRouteTableAttachmentSolution {  
  
    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");  
  
        ICredential auth = new GlobalCredentials()  
            .withAk(ak)  
            .withSk(sk);  
  
        CcClient client = CcClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ShowCentralNetworkErRouteTableAttachmentRequest request = new  
        ShowCentralNetworkErRouteTableAttachmentRequest();  
        try {  
            ShowCentralNetworkErRouteTableAttachmentResponse response =  
            client.showCentralNetworkErRouteTableAttachment(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
```

```
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ShowCentralNetworkErRouteTableAttachmentRequest()
        response = client.show_central_network_er_route_table_attachment(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

```
}  
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The details of the enterprise router route table on the central network have been queried.

Error Codes

See [Error Codes](#).

4.8.6 Updating an Enterprise Router Route Table on a Central Network

Function

This API is used to update an enterprise router route table on a central network.

Calling Method

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

URI

PUT /v3/{domain_id}/gcn/central-network/{central_network_id}/er-route-table-attachments/{er_route_table_attachment_id}

Table 4-378 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
central_network_id	Yes	String	Central network ID. Minimum: 36 Maximum: 36

Parameter	Mandatory	Type	Description
er_route_table_attachment_id	Yes	String	ID of the enterprise router route table attachment on the central network. Minimum: 36 Maximum: 36

Request Parameters

Table 4-379 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-380 Request body parameters

Parameter	Mandatory	Type	Description
central_network_er_route_table_attachment	Yes	UpdateCentralNetworkErRouteTableAttachment object	Details of the enterprise router on the central network to be updated.

Table 4-381 UpdateCentralNetworkErRouteTableAttachment

Parameter	Mandatory	Type	Description
name	No	String	Resource name.
description	No	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255

Response Parameters

Status code: **200**

Table 4-382 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
central_network_er_route_table_attachment	CentralNetworkErRouteTableAttachment object	Details of the enterprise router route table used as an attachment.

Table 4-383 CentralNetworkErRouteTableAttachment

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
state	String	Central network connection status. <ul style="list-style-type: none"> ● AVAILABLE: The connection is available. ● CREATING: The connection is being created. ● UPDATING: The connection is being updated. ● DELETING: The connection is being deleted. ● FREEZING: The connection is being frozen. ● UNFREEZING: The connection is being unfrozen. ● RECOVERING: The connection is being recovered. ● FAILED: The operation on the connection failed. ● DELETED: The connection is deleted. ● APPROVING: The connection is being approved. ● APPROVED: The connection is approved. ● UNAPPROVED: The approval failed.

Parameter	Type	Description
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
central_network_id	String	Central network ID.
central_network_plane_id	String	ID of the central network plane.
global_connection_bandwidth_id	String	Global connection bandwidth ID.
is_frozen	Boolean	Whether the resource is frozen.
bandwidth_type	String	Bandwidth type. The bandwidth types are as follows: <ul style="list-style-type: none"> • BandwidthPackage: A global private bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global private bandwidth. • TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.
bandwidth_size	Integer	Bandwidth range, in Mbit/s.
enterprise_router_id	String	Enterprise router ID.
enterprise_router_project_id	String	Project ID of the enterprise router.
enterprise_router_region_id	String	Region ID of the enterprise router.
enterprise_router_attachment_id	String	Attachment ID of the enterprise router.
enterprise_router_table_id	String	Resource ID.
enterprise_router_site_code	String	Site code definition.
attached_enterprise_router_table_id	String	Resource ID.

Parameter	Type	Description
attached_enterprise_region_id	String	Region ID.
attached_enterprise_project_id	String	Project ID.
attached_enterprise_site_code	String	Site code definition.
attached_enterprise_id	String	Resource ID.
attached_enterprise_attachment_id	String	Resource ID.
approved_state	String	Approval status. <ul style="list-style-type: none"> ● APPROVING: Approving ● APPROVED: Approved ● UNAPPROVED: Approval failed
hosted_cloud	String	Huawei Cloud or partner cloud. <ul style="list-style-type: none"> ● HWCloud: Huawei Cloud ● Ireland: partner cloud in Ireland
reason	String	Reason for rejecting an enterprise router route table as an attachment. Minimum: 0 Maximum: 1024

Example Requests

Updating an enterprise router route table on a central network

```
PUT /v3/{domain_id}/gcn/central-network/{central_network_id}/er-route-table-attachments/
{er_route_table_attachment_id}
{
  "central_network_er_route_table_attachment" : {
    "name" : "name",
    "description" : "description"
  }
}
```

Example Responses

Status code: 200

The enterprise router route table on the central network has been updated.

```
{
  "request_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
```

```
"central_network_er_route_table_attachment" : {
  "id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "name" : "name",
  "description" : "description",
  "domain_id" : "XXX",
  "state" : "AVAILABLE",
  "created_at" : "2023-10-09T10:09:28.908Z",
  "updated_at" : "2023-10-09T10:09:28.908Z",
  "central_network_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "central_network_plane_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "global_connection_bandwidth_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "bandwidth_type" : "BandwidthPackage",
  "bandwidth_size" : 20,
  "is_frozen" : false,
  "enterprise_router_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "enterprise_router_project_id" : "XXX",
  "enterprise_router_region_id" : "cn-north-4",
  "enterprise_router_attachment_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "enterprise_router_table_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "enterprise_router_site_code" : "cn-north-bj4",
  "attached_er_table_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "attached_er_table_region_id" : "cn-north-4",
  "attached_er_table_project_id" : "XXX",
  "attached_er_table_site_code" : "cn-north-bj4",
  "attached_er_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "attached_er_attachment_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "approved_state" : "APPROVING",
  "hosted_cloud" : "HWCloud",
  "reason" : "APPROVING"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Updating an enterprise router route table on a central network

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class UpdateCentralNetworkErRouteTableAttachmentSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);
```

```
CcClient client = CcClient.newBuilder()
    .withCredential(auth)
    .withRegion(CcRegion.valueOf("<YOUR REGION>"))
    .build();
UpdateCentralNetworkErRouteTableAttachmentRequest request = new
UpdateCentralNetworkErRouteTableAttachmentRequest();
UpdateCentralNetworkErRouteTableAttachmentRequestBody body = new
UpdateCentralNetworkErRouteTableAttachmentRequestBody();
UpdateCentralNetworkErRouteTableAttachment centralNetworkErRouteTableAttachment = new
UpdateCentralNetworkErRouteTableAttachment();
centralNetworkErRouteTableAttachmentbody.withName("name")
    .withDescription("description");
body.withCentralNetworkErRouteTableAttachment(centralNetworkErRouteTableAttachmentbody);
request.withBody(body);
try {
    UpdateCentralNetworkErRouteTableAttachmentResponse response =
client.updateCentralNetworkErRouteTableAttachment(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

Updating an enterprise router route table on a central network

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = UpdateCentralNetworkErRouteTableAttachmentRequest()
        centralNetworkErRouteTableAttachmentbody = UpdateCentralNetworkErRouteTableAttachment(
            name="name",
            description="description"
        )
        request.body = UpdateCentralNetworkErRouteTableAttachmentRequestBody(
            central_network_er_route_table_attachment=centralNetworkErRouteTableAttachmentbody
        )
        response = client.update_central_network_er_route_table_attachment(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

Updating an enterprise router route table on a central network

```
package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateCentralNetworkErRouteTableAttachmentRequest{}
    nameCentralNetworkErRouteTableAttachment:= "name"
    descriptionCentralNetworkErRouteTableAttachment:= "description"
    centralNetworkErRouteTableAttachmentbody := &model.UpdateCentralNetworkErRouteTableAttachment{
        Name: &nameCentralNetworkErRouteTableAttachment,
        Description: &descriptionCentralNetworkErRouteTableAttachment,
    }
    request.Body = &model.UpdateCentralNetworkErRouteTableAttachmentRequestBody{
        CentralNetworkErRouteTableAttachment: centralNetworkErRouteTableAttachmentbody,
    }
    response, err := client.UpdateCentralNetworkErRouteTableAttachment(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The enterprise router route table on the central network has been updated.

Error Codes

See [Error Codes](#).

4.8.7 Querying a Global DC Gateway on a Central Network

Function

This API is used to query the details of a global DC gateway on the central network.

Calling Method

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

URI

GET /v3/{domain_id}/gcn/central-network/{central_network_id}/gdgw-attachments/{gdgw_attachment_id}

Table 4-384 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
central_network_id	Yes	String	Central network ID. Minimum: 36 Maximum: 36
gdgw_attachment_id	Yes	String	ID of the global DC gateway attachment on the central network. Minimum: 36 Maximum: 36

Request Parameters

Table 4-385 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 200

Table 4-386 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
central_network_gdgw_attachment	CentralNetworkGdgwAttachment object	Details of the global DC gateway used as an attachment.

Table 4-387 CentralNetworkGdgwAttachment

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.

Parameter	Type	Description
state	String	<p>Central network connection status.</p> <ul style="list-style-type: none"> ● AVAILABLE: The connection is available. ● CREATING: The connection is being created. ● UPDATING: The connection is being updated. ● DELETING: The connection is being deleted. ● FREEZING: The connection is being frozen. ● UNFREEZING: The connection is being unfrozen. ● RECOVERING: The connection is being recovered. ● FAILED: The operation on the connection failed. ● DELETED: The connection is deleted. ● APPROVING: The connection is being approved. ● APPROVED: The connection is approved. ● UNAPPROVED: The approval failed.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
central_network_id	String	Central network ID.
central_network_plane_id	String	ID of the central network plane.
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_type	String	<p>Bandwidth type. The bandwidth types are as follows:</p> <ul style="list-style-type: none"> ● BandwidthPackage: A global private bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global private bandwidth. ● TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.

Parameter	Type	Description
bandwidth_size	Integer	Bandwidth range, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.
enterprise_router_id	String	Enterprise router ID.
enterprise_router_project_id	String	Project ID of the enterprise router.
enterprise_router_region_id	String	Region ID of the enterprise router.
enterprise_router_attachment_id	String	Attachment ID of the enterprise router.
global_dc_gateway_peer_link_id	String	Resource ID.
global_dc_gateway_id	String	Resource ID.
global_dc_gateway_project_id	String	Project ID.
global_dc_gateway_region_id	String	Region ID.
enterprise_router_site_code	String	Site code definition.
global_dc_gateway_site_code	String	Site code definition.

Example Requests

Querying the details of a global DC gateway on a central network

```
GET /v3/{domain_id}/gcn/central-network/{central_network_id}/gdgw-attachments/{gdgw_attachment_id}
```

Example Responses

Status code: 200

The details of the global DC gateway on a central network have been queried.

```
{
  "request_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "central_network_gdgw_attachment" : {
```

```
"id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
"name" : "name",
"description" : "description",
"domain_id" : "XXX",
"state" : "AVAILABLE",
"created_at" : "2023-10-09T10:12:28.127Z",
"updated_at" : "2023-10-09T10:12:28.127Z",
"central_network_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
"central_network_plane_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
"global_connection_bandwidth_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
"bandwidth_type" : "BandwidthPackage",
"bandwidth_size" : 20,
"is_frozen" : false,
"enterprise_router_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
"enterprise_router_project_id" : "XXX",
"enterprise_router_region_id" : "cn-north-4",
"enterprise_router_attachment_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
"global_dc_gateway_peer_link_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
"global_dc_gateway_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
"global_dc_gateway_project_id" : "XXX",
"global_dc_gateway_region_id" : "cn-north-4",
"enterprise_router_site_code" : "cn-north-bj4",
"global_dc_gateway_site_code" : "cn-north-bj4"
}
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class ShowCentralNetworkGdgwAttachmentSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

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

        ShowCentralNetworkGdgwAttachmentRequest request = new
        ShowCentralNetworkGdgwAttachmentRequest();
        try {
            ShowCentralNetworkGdgwAttachmentResponse response =
            client.showCentralNetworkGdgwAttachment(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ShowCentralNetworkGdgwAttachmentRequest()
        response = client.show_central_network_gdgw_attachment(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

auth := global.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    Build()

client := cc.NewCcClient(
    cc.CcClientBuilder().
    WithRegion(region.ValueOf("<YOUR REGION>")).
    WithCredential(auth).
    Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The details of the global DC gateway on a central network have been queried.

Error Codes

See [Error Codes](#).

4.8.8 Updating a Global DC Gateway on a Central Network

Function

This API is used to update a global DC gateway on a central network.

Calling Method

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

URI

PUT /v3/{domain_id}/gcn/central-network/{central_network_id}/gdgw-attachments/{gdgw_attachment_id}

Table 4-388 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
central_network_id	Yes	String	Central network ID. Minimum: 36 Maximum: 36
gdgw_attachment_id	Yes	String	ID of the global DC gateway attachment on the central network. Minimum: 36 Maximum: 36

Request Parameters

Table 4-389 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-390 Request body parameters

Parameter	Mandatory	Type	Description
central_network_gdgw_attachment	Yes	UpdateCentralNetworkGdgwAttachment object	Details of the global DC gateway on the central network to be updated.

Table 4-391 UpdateCentralNetworkGdgwAttachment

Parameter	Mandatory	Type	Description
name	No	String	Resource name.

Parameter	Mandatory	Type	Description
description	No	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255

Response Parameters

Status code: 200

Table 4-392 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
central_network_gdgw_attachment	CentralNetworkGdgwAttachment object	Details of the global DC gateway used as an attachment.

Table 4-393 CentralNetworkGdgwAttachment

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.

Parameter	Type	Description
state	String	<p>Central network connection status.</p> <ul style="list-style-type: none"> ● AVAILABLE: The connection is available. ● CREATING: The connection is being created. ● UPDATING: The connection is being updated. ● DELETING: The connection is being deleted. ● FREEZING: The connection is being frozen. ● UNFREEZING: The connection is being unfrozen. ● RECOVERING: The connection is being recovered. ● FAILED: The operation on the connection failed. ● DELETED: The connection is deleted. ● APPROVING: The connection is being approved. ● APPROVED: The connection is approved. ● UNAPPROVED: The approval failed.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
central_network_id	String	Central network ID.
central_network_plane_id	String	ID of the central network plane.
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_type	String	<p>Bandwidth type. The bandwidth types are as follows:</p> <ul style="list-style-type: none"> ● BandwidthPackage: A global private bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global private bandwidth. ● TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.

Parameter	Type	Description
bandwidth_size	Integer	Bandwidth range, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.
enterprise_router_id	String	Enterprise router ID.
enterprise_router_project_id	String	Project ID of the enterprise router.
enterprise_router_region_id	String	Region ID of the enterprise router.
enterprise_router_attachment_id	String	Attachment ID of the enterprise router.
global_dc_gateway_peer_link_id	String	Resource ID.
global_dc_gateway_id	String	Resource ID.
global_dc_gateway_project_id	String	Project ID.
global_dc_gateway_region_id	String	Region ID.
enterprise_router_site_code	String	Site code definition.
global_dc_gateway_site_code	String	Site code definition.

Example Requests

Updating a global DC gateway on a central network

```
PUT /v3/{domain_id}/gcn/central-network/{central_network_id}/gdgw-attachments/{gdgw_attachment_id}
{
  "central_network_gdgw_attachment": {
    "name": "name",
    "description": "description"
  }
}
```

Example Responses

Status code: 200

The global DC gateway on the central network has been updated.

```
{
  "request_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "central_network_gdgw_attachment": {
    "id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "name": "name",
    "description": "description",
    "domain_id": "XXX",
    "state": "AVAILABLE",
    "created_at": "2023-10-09T10:13:18.045Z",
    "updated_at": "2023-10-09T10:13:18.045Z",
    "central_network_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "central_network_plane_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "global_connection_bandwidth_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "bandwidth_type": "BandwidthPackage",
    "bandwidth_size": 20,
    "is_frozen": false,
    "enterprise_router_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "enterprise_router_project_id": "XXX",
    "enterprise_router_region_id": "cn-north-4",
    "enterprise_router_attachment_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "global_dc_gateway_peer_link_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "global_dc_gateway_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "global_dc_gateway_project_id": "XXX",
    "global_dc_gateway_region_id": "cn-north-4",
    "enterprise_router_site_code": "cn-north-bj4",
    "global_dc_gateway_site_code": "cn-north-bj4"
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Updating a global DC gateway on a central network

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class UpdateCentralNetworkGdgwAttachmentSolution {

    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");

        ICredential auth = new GlobalCredentials()
```

```
.withAk(ak)
.withSk(sk);

CcClient client = CcClient.newBuilder()
    .withCredential(auth)
    .withRegion(CcRegion.valueOf("<YOUR REGION>"))
    .build();
UpdateCentralNetworkGdgwAttachmentRequest request = new
UpdateCentralNetworkGdgwAttachmentRequest();
UpdateCentralNetworkGdgwAttachmentRequestBody body = new
UpdateCentralNetworkGdgwAttachmentRequestBody();
UpdateCentralNetworkGdgwAttachment centralNetworkGdgwAttachmentbody = new
UpdateCentralNetworkGdgwAttachment();
centralNetworkGdgwAttachmentbody.withName("name")
    .withDescription("description");
body.withCentralNetworkGdgwAttachment(centralNetworkGdgwAttachmentbody);
request.withBody(body);
try {
    UpdateCentralNetworkGdgwAttachmentResponse response =
client.updateCentralNetworkGdgwAttachment(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

Updating a global DC gateway on a central network

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = UpdateCentralNetworkGdgwAttachmentRequest()
        centralNetworkGdgwAttachmentbody = UpdateCentralNetworkGdgwAttachment(
            name="name",
            description="description"
        )
        request.body = UpdateCentralNetworkGdgwAttachmentRequestBody(
```

```
        central_network_gdgw_attachment=centralNetworkGdgwAttachmentbody
    )
    response = client.update_central_network_gdgw_attachment(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

Updating a global DC gateway on a central network

```
package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateCentralNetworkGdgwAttachmentRequest{
        nameCentralNetworkGdgwAttachment:= "name"
        descriptionCentralNetworkGdgwAttachment:= "description"
        centralNetworkGdgwAttachmentbody := &model.UpdateCentralNetworkGdgwAttachment{
            Name: &nameCentralNetworkGdgwAttachment,
            Description: &descriptionCentralNetworkGdgwAttachment,
        }
    }
    request.Body = &model.UpdateCentralNetworkGdgwAttachmentRequestBody{
        CentralNetworkGdgwAttachment: centralNetworkGdgwAttachmentbody,
    }
    response, err := client.UpdateCentralNetworkGdgwAttachment(request)
    if err == nil {
        fmt.Printf("%v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the [Sample Code](#) tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The global DC gateway on the central network has been updated.

Error Codes

See [Error Codes](#).

4.8.9 Querying the List of Central Network Attachments

Function

This API is used to query the list of central network attachments.

Parameters **marker** and **limit** are used for pagination query. The default value of **limit** is **0**. If **marker** is not specified, the first data record is returned.

Calling Method

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

URI

GET /v3/{domain_id}/gcn/central-network/{central_network_id}/attachments

Table 4-394 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
central_network_id	Yes	String	Central network ID. Minimum: 36 Maximum: 36

Table 4-395 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 1000 Minimum: 1 Maximum: 1000 Default: 1000
marker	No	String	Pagination query information. You can obtain the marker values from the response of the last API call. You can enter the marker value of the previous page or the next page. If you enter the marker value of the previous page, the previous page will be queried. If you enter the marker value of the next page, the next page will be queried. During pagination query, the query criteria, including the filters, sorting criteria, and the limit value, cannot be modified. Minimum: 1 Maximum: 4096
sort_key	No	String	Field for sorting. Default: updated_at Minimum: 1 Maximum: 36
sort_dir	No	Object	Whether the resources are sorted in ascending or descending order. asc indicates the ascending order and desc indicates the descending order.
id	No	Array	Resource ID. Multiple IDs can be queried. Array Length: 1 - 20
name	No	Array	Resource name. Multiple names can be queried. Array Length: 1 - 20

Parameter	Mandatory	Type	Description
attachment_instance_type	No	Array	Attachment type. Multiple attachment types can be queried. Array Length: 1 - 20
state	No	Array	Central network connection status. Multiple statuses can be queried. Array Length: 1 - 20
attachment_instance_id	No	Array	Attachment ID. Array Length: 1 - 10

Request Parameters

Table 4-396 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 200

Table 4-397 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
page_info	PageInfo object	Pagination query information.
central_network_attachments	Array of CentralNetworkAttachment objects	List of connections on the central network. Array Length: 0 - 2000

Table 4-398 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier. Minimum: 1 Maximum: 4096
previous_mar ker	String	Forward pagination identifier. Minimum: 1 Maximum: 4096
current_count	Integer	Number of the resources in the current list. Minimum: 0 Maximum: 2000

Table 4-399 CentralNetworkAttachment

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.

Parameter	Type	Description
state	String	<p>Central network attachment status.</p> <ul style="list-style-type: none"> ● AVAILABLE: The attachment is available. ● CREATING: The attachment is being created. ● UPDATING: The attachment is being updated. ● DELETING: The attachment is being deleted. ● FREEZING: The attachment is being frozen. ● UNFREEZING: The attachment is being unfrozen. ● RECOVERING: The attachment is being recovered. ● FAILED: The operation on the attachment failed. ● DELETED: The attachment is deleted. ● APPROVING: The attachment is being approved. ● APPROVED: The attachment is approved. ● UNAPPROVED: The approval failed.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
central_network_id	String	Central network ID.
central_network_plane_id	String	ID of the central network plane.
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_type	String	<p>Bandwidth type. The bandwidth types are as follows:</p> <ul style="list-style-type: none"> ● BandwidthPackage: A global private bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global private bandwidth. ● TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.

Parameter	Type	Description
bandwidth_size	Integer	Bandwidth range, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.
enterprise_router_id	String	Enterprise router ID.
enterprise_router_project_id	String	Project ID of the enterprise router.
enterprise_router_region_id	String	Region ID of the enterprise router.
enterprise_router_attachment_id	String	Attachment ID of the enterprise router.
attachment_instance_type	String	Type of the resource that can be added to a central network as an attachment. The value can be GDGW (global DC gateway) or ER_ROUTE_TABLE (enterprise router route table).
attachment_instance_id	String	ID of the resource used as an attachment on the central network, for example, enterprise router route table ID or global DC gateway ID.
attachment_id	String	Attachment ID of the enterprise router or peer link ID of the global DC gateway.
attachment_instance_project_id	String	Project ID of the resource used as an attachment on the central network.
attachment_instance_region_id	String	Region ID of the resource used as an attachment on the central network.
attachment_instance_site_code	String	Site code of the resource used as an attachment on the central network.
enterprise_router_site_code	String	Site code of the enterprise router.
specification_value	CentralNetworkAttachmentSpecificationValueInfo object	Additional information about an attachment.

Table 4-400 CentralNetworkAttachmentSpecificationValueInfo

Parameter	Type	Description
enterprise_router_table_id	String	ID of the enterprise router route table.
attached_enterprise_router_id	String	Additional information about the enterprise router route table used as an attachment on the central network, that is, ID of the enterprise router that the route table is created for.
approved_status	String	Approval status. <ul style="list-style-type: none"> ● APPROVING: Approving ● APPROVED: Approved ● UNAPPROVED: Approval failed
hosted_cloud	String	Huawei Cloud or partner cloud. <ul style="list-style-type: none"> ● HWCloud: Huawei Cloud ● Ireland: partner cloud in Ireland
reason	String	Reason for rejecting attachment creation. Minimum: 0 Maximum: 1024

Example Requests

Querying the list of central network attachments

```
GET /v3/{domain_id}/gcn/central-network/{central_network_id}/attachments
```

Example Responses

Status code: 200

The list of attachments on the central network has been queried.

```
{
  "request_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "page_info": {
    "next_marker": "8EDF12u71N...",
    "previous_marker": "8EDF12u71N...",
    "current_count": 1
  },
  "central_network_attachments": [ {
    "id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "name": "name",
    "description": "description",
    "domain_id": "XXX",
    "state": "AVAILABLE",
    "created_at": "2023-10-09T10:13:57.962Z",
    "updated_at": "2023-10-09T10:13:57.962Z",
    "central_network_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "central_network_plane_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "global_connection_bandwidth_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "bandwidth_type": "BandwidthPackage",
  }
]
```

```
"bandwidth_size" : 20,
"is_frozen" : false,
"enterprise_router_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
"enterprise_router_project_id" : "XXX",
"enterprise_router_region_id" : "cn-north-4",
"enterprise_router_attachment_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
"attachment_instance_type" : "GDGW",
"attachment_instance_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
"attachment_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
"attachment_instance_project_id" : "XXX",
"attachment_instance_region_id" : "cn-north-4",
"attachment_instance_site_code" : "cn-north-bj4",
"enterprise_router_site_code" : "cn-north-bj4",
"specification_value" : {
  "enterprise_router_table_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "attached_er_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "approved_state" : "APPROVING",
  "hosted_cloud" : "HWCloud",
  "reason" : "string"
}
}
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListCentralNetworkAttachmentsSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ListCentralNetworkAttachmentsRequest request = new ListCentralNetworkAttachmentsRequest();
        request.withLimit(<limit>);
        request.withMarker("<marker>");
        request.withSortKey("<sort_key>");
        request.withSortDir();
        request.withId();
    }
}
```

```
request.withName();
request.withAttachmentInstanceType();
request.withState();
request.withAttachmentInstanceId();
try {
    ListCentralNetworkAttachmentsResponse response = client.listCentralNetworkAttachments(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdccc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdccc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ListCentralNetworkAttachmentsRequest()
        request.limit = <limit>
        request.marker = "<marker>"
        request.sort_key = "<sort_key>"
        request.sort_dir =
        request.id =
        request.name =
        request.attachment_instance_type =
        request.state =
        request.attachment_instance_id =
        response = client.list_central_network_attachments(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListCentralNetworkAttachmentsRequest{}
    limitRequest:= int32(<limit>)
    request.Limit = &limitRequest
    markerRequest:= "<marker>"
    request.Marker = &markerRequest
    sortKeyRequest:= "<sort_key>"
    request.SortKey = &sortKeyRequest
    response, err := client.ListCentralNetworkAttachments(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The list of attachments on the central network has been queried.

Error Codes

See [Error Codes](#).

4.8.10 Removing an Attachment from a Central Network

Function

This API is used to remove an attachment from a central network.

Calling Method

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

URI

DELETE /v3/{domain_id}/gcn/central-network/{central_network_id}/attachments/{attachment_id}

Table 4-401 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
central_network_id	Yes	String	Central network ID. Minimum: 36 Maximum: 36
attachment_id	Yes	String	ID of the attachment on the central network. Minimum: 36 Maximum: 36

Request Parameters

Table 4-402 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 202

Table 4-403 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
central_network_attachment	CentralNetworkAttachment object	Details of the attachment on the central network.

Table 4-404 CentralNetworkAttachment

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
state	String	Central network attachment status. <ul style="list-style-type: none"> ● AVAILABLE: The attachment is available. ● CREATING: The attachment is being created. ● UPDATING: The attachment is being updated. ● DELETING: The attachment is being deleted. ● FREEZING: The attachment is being frozen. ● UNFREEZING: The attachment is being unfrozen. ● RECOVERING: The attachment is being recovered. ● FAILED: The operation on the attachment failed. ● DELETED: The attachment is deleted. ● APPROVING: The attachment is being approved. ● APPROVED: The attachment is approved. ● UNAPPROVED: The approval failed.

Parameter	Type	Description
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
central_network_id	String	Central network ID.
central_network_plane_id	String	ID of the central network plane.
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_type	String	Bandwidth type. The bandwidth types are as follows: <ul style="list-style-type: none"> • BandwidthPackage: A global private bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global private bandwidth. • TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.
bandwidth_size	Integer	Bandwidth range, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.
enterprise_router_id	String	Enterprise router ID.
enterprise_router_project_id	String	Project ID of the enterprise router.
enterprise_router_region_id	String	Region ID of the enterprise router.
enterprise_router_attachment_id	String	Attachment ID of the enterprise router.
attachment_instance_type	String	Type of the resource that can be added to a central network as an attachment. The value can be GDGW (global DC gateway) or ER_ROUTE_TABLE (enterprise router route table).

Parameter	Type	Description
attachment_instance_id	String	ID of the resource used as an attachment on the central network, for example, enterprise router route table ID or global DC gateway ID.
attachment_id	String	Attachment ID of the enterprise router or peer link ID of the global DC gateway.
attachment_instance_project_id	String	Project ID of the resource used as an attachment on the central network.
attachment_instance_region_id	String	Region ID of the resource used as an attachment on the central network.
attachment_instance_site_code	String	Site code of the resource used as an attachment on the central network.
enterprise_router_site_code	String	Site code of the enterprise router.
specification_value	CentralNetworkAttachmentSpecificationValueInfo object	Additional information about an attachment.

Table 4-405 CentralNetworkAttachmentSpecificationValueInfo

Parameter	Type	Description
enterprise_router_table_id	String	ID of the enterprise router route table.
attached_enterprise_router_id	String	Additional information about the enterprise router route table used as an attachment on the central network, that is, ID of the enterprise router that the route table is created for.
approved_status	String	Approval status. <ul style="list-style-type: none"> ● APPROVING: Approving ● APPROVED: Approved ● UNAPPROVED: Approval failed
hosted_cloud	String	Huawei Cloud or partner cloud. <ul style="list-style-type: none"> ● HWCloud: Huawei Cloud ● Ireland: partner cloud in Ireland

Parameter	Type	Description
reason	String	Reason for rejecting attachment creation. Minimum: 0 Maximum: 1024

Example Requests

Removing an attachment from a central network

```
DELETE /v3/{domain_id}/gcn/central-network/{central_network_id}/attachments/{attachment_id}
```

Example Responses

Status code: 202

The attachment removed from a central network.

```
{
  "request_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "central_network_attachment": {
    "id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "name": "name",
    "description": "description",
    "domain_id": "XXX",
    "state": "AVAILABLE",
    "created_at": "2023-10-09T10:15:32.134Z",
    "updated_at": "2023-10-09T10:15:32.134Z",
    "central_network_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "central_network_plane_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "global_connection_bandwidth_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "bandwidth_type": "BandwidthPackage",
    "bandwidth_size": 20,
    "is_frozen": false,
    "enterprise_router_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "enterprise_router_project_id": "XXX",
    "enterprise_router_region_id": "cn-north-4",
    "enterprise_router_attachment_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "attachment_instance_type": "GDGW",
    "attachment_instance_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "attachment_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "attachment_instance_project_id": "XXX",
    "attachment_instance_region_id": "cn-north-4",
    "attachment_instance_site_code": "cn-north-bj4",
    "enterprise_router_site_code": "cn-north-bj4",
    "specification_value": {
      "enterprise_router_table_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
      "attached_er_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
      "approved_state": "APPROVING",
      "hosted_cloud": "HWCloud",
      "reason": "string"
    }
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class DeleteCentralNetworkAttachmentSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteCentralNetworkAttachmentRequest request = new DeleteCentralNetworkAttachmentRequest();
        try {
            DeleteCentralNetworkAttachmentResponse response =
client.deleteCentralNetworkAttachment(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdccc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdccc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")
```

```
credentials = GlobalCredentials(ak, sk) \

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

try:
    request = DeleteCentralNetworkAttachmentRequest()
    response = client.delete_central_network_attachment(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
202	The attachment removed from a central network.

Error Codes

See [Error Codes](#).

4.9 Central Network Connections

4.9.1 Querying the List of Central Network Connections

Function

This API is used to query the list of central network connections.

Parameters **marker** and **limit** are used for pagination query. The default value of **limit** is **0**. If **marker** is not specified, the first data record is returned.

Calling Method

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

URI

GET /v3/{domain_id}/gcn/central-network/{central_network_id}/connections

Table 4-406 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
central_network_id	Yes	String	Central network ID. Minimum: 36 Maximum: 36

Table 4-407 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 1000 Minimum: 1 Maximum: 1000 Default: 1000
marker	No	String	Pagination query information. You can obtain the marker values from the response of the last API call. You can enter the marker value of the previous page or the next page. If you enter the marker value of the previous page, the previous page will be queried. If you enter the marker value of the next page, the next page will be queried. During pagination query, the query criteria, including the filters, sorting criteria, and the limit value, cannot be modified. Minimum: 1 Maximum: 4096
sort_key	No	String	Field for sorting. Default: updated_at Minimum: 1 Maximum: 36
sort_dir	No	Object	Whether the resources are sorted in ascending or descending order. asc indicates the ascending order and desc indicates the descending order.
id	No	Array	Resource ID. Multiple IDs can be queried. Array Length: 1 - 20
name	No	Array	Resource name. Multiple names can be queried. Array Length: 1 - 20

Parameter	Mandatory	Type	Description
state	No	Array	Central network connection status. Multiple statuses can be queried. Array Length: 1 - 20
global_connection_bandwidth_id	No	Array	Bandwidth package IDs. Array Length: 1 - 20
bandwidth_type	No	Object	Bandwidth type. The bandwidth types are as follows: <ul style="list-style-type: none"> • BandwidthPackage: A global private bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global private bandwidth. • TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.
connection_type	No	Object	Connection type.
is_cross_region	No	Boolean	Whether there are different regions.

Request Parameters

Table 4-408 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 200

Table 4-409 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
page_info	PageInfo object	Pagination query information.
central_network_connections	Array of CentralNetworkConnection objects	List of the central network connections. Array Length: 0 - 2000

Table 4-410 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier. Minimum: 1 Maximum: 4096
previous_marker	String	Forward pagination identifier. Minimum: 1 Maximum: 4096
current_count	Integer	Number of the resources in the current list. Minimum: 0 Maximum: 2000

Table 4-411 CentralNetworkConnection

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.

Parameter	Type	Description
enterprise_project_id	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
central_network_id	String	Central network ID.
central_network_plane_id	String	ID of the central network plane.
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_type	String	Bandwidth type. The bandwidth types are as follows: <ul style="list-style-type: none"> • BandwidthPackage: A global private bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global private bandwidth. • TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.
bandwidth_size	Integer	Bandwidth range, in Mbit/s.
state	String	Central network connection status. <ul style="list-style-type: none"> • AVAILABLE: The connection is available. • CREATING: The connection is being created. • UPDATING: The connection is being updated. • DELETING: The connection is being deleted. • FREEZING: The connection is being frozen. • UNFREEZING: The connection is being unfrozen. • RECOVERING: The connection is being recovered. • FAILED: The operation on the connection failed. • DELETED: The connection is deleted. • APPROVING: The connection is being approved. • APPROVED: The connection is approved. • UNAPPROVED: The approval failed.

Parameter	Type	Description
is_frozen	Boolean	Whether the resource is frozen.
connection_type	String	Type of a central network connection. <ul style="list-style-type: none"> ● ER-ER: connections between enterprise routers ● ER-GDGW: connections between enterprise routers and global DC gateways ● ER-ER_ROUTE_TABLE: connections between enterprise routers and route tables of other enterprise routers
connection_point_pair	Array of ConnectionPoint objects	Both ends of a central network connection. The length is fixed to an array of 2. Array Length: 2 - 2
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.

Table 4-412 ConnectionPoint

Parameter	Type	Description
id	String	Resource ID.
project_id	String	Project ID.
region_id	String	Region ID.
site_code	String	Site code definition.
instance_id	String	Resource ID.
type	String	Type of a central network connection point. <ul style="list-style-type: none"> ● ER: an enterprise router ● GDGW: a global DC gateway ● ER_ROUTE_TABLE: an enterprise router route table

Example Requests

Querying the list of central network connections

```
GET /v3/{domain_id}/gcn/central-network/{central_network_id}/connections
```

Example Responses

Status code: 200

The list of central network connections has been queried.

```
{
  "request_id": "0050ea65af7e190d9a791d9e69f28e63",
  "page_info": {
    "current_count": 1
  },
  "central_network_connections": [ {
    "id": "eb350a5c-06c1-4b12-9ae4-3820f31faaa0",
    "name": "er-connection",
    "domain_id": "XXX",
    "enterprise_project_id": "0",
    "central_network_id": "43ad756e-2780-463e-a8ed-27a5bd77b7a7",
    "central_network_plane_id": "238f60d5-ed1a-4508-8473-45509c530c8f",
    "bandwidth_type": "TestBandwidth",
    "state": "AVAILABLE",
    "is_frozen": false,
    "connection_type": "ER-ER",
    "connection_point_pair": [ {
      "id": "1c233723-234c-4b50-8fba-7072b4c6aa1a",
      "project_id": "XXX",
      "region_id": "cn-north-4",
      "site_code": "cn-north-4",
      "instance_id": "d238dd85-f769-485b-aa05-d20e1d3889df",
      "type": "ER"
    }, {
      "id": "8641d7f0-bd0c-49fe-8b70-3649cd7dd9b1",
      "project_id": "XXX",
      "region_id": "cn-north-1",
      "site_code": "cn-north-1",
      "instance_id": "96abbb18-4a77-4103-aa8e-b1c836154282",
      "type": "ER"
    }
  ],
  "created_at": "2023-10-09T08:02:43.31Z",
  "updated_at": "2023-10-09T08:02:43.307Z"
} ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListCentralNetworkConnectionsSolution {

    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");

ICredential auth = new GlobalCredentials()
    .withAk(ak)
    .withSk(sk);

CcClient client = CcClient.newBuilder()
    .withCredential(auth)
    .withRegion(CcRegion.valueOf("<YOUR REGION>"))
    .build();
ListCentralNetworkConnectionsRequest request = new ListCentralNetworkConnectionsRequest();
request.withLimit(<limit>);
request.withMarker("<marker>");
request.withSortKey("<sort_key>");
request.withSortDir();
request.withId();
request.withName();
request.withState();
request.withGlobalConnectionBandwidthId();
request.withBandwidthType();
request.withConnectionType();
request.withIsCrossRegion(<is_cross_region>);
try {
    ListCentralNetworkConnectionsResponse response = client.listCentralNetworkConnections(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
```

```
request = ListCentralNetworkConnectionsRequest()
request.limit = <limit>
request.marker = "<marker>"
request.sort_key = "<sort_key>"
request.sort_dir =
request.id =
request.name =
request.state =
request.global_connection_bandwidth_id =
request.bandwidth_type =
request.connection_type =
request.is_cross_region = <IsCrossRegion>
response = client.list_central_network_connections(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListCentralNetworkConnectionsRequest{}
    limitRequest:= int32(<limit>)
    request.Limit = &limitRequest
    markerRequest:= "<marker>"
    request.Marker = &markerRequest
    sortKeyRequest:= "<sort_key>"
    request.SortKey = &sortKeyRequest
    isCrossRegionRequest:= <is_cross_region>
    request.IsCrossRegion = &isCrossRegionRequest
    response, err := client.ListCentralNetworkConnections(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The list of central network connections has been queried.

Error Codes

See [Error Codes](#).

4.9.2 Modifying the Bandwidth of a Central Network Connection

Function

This API is used to modify the bandwidth of a central network connection.

Calling Method

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

URI

PUT /v3/{domain_id}/gcn/central-network/{central_network_id}/connections/{connection_id}

Table 4-413 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
central_network_id	Yes	String	Central network ID. Minimum: 36 Maximum: 36
connection_id	Yes	String	ID of the connection on the central network. Minimum: 36 Maximum: 36

Request Parameters

Table 4-414 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-415 Request body parameters

Parameter	Mandatory	Type	Description
central_network_connection	Yes	UpdateCentralNetworkConnection object	Details of the central network connection to be updated.- bandwidth_type : bandwidth package (billed by fixed bandwidth or traffic) or test bandwidth (free bandwidth for testing cross-region connectivity).- global_connection_bandwidth_id : mandatory if bandwidth_type is BandwidthPackage .- bandwidth_size : mandatory if bandwidth_type is BandwidthPackage (the total of cross-site connection bandwidths cannot exceed the bandwidth specified by the bandwidth package) or Traffic and is not available if bandwidth_type is set to TestBandwidth .

Table 4-416 UpdateCentralNetworkConnection

Parameter	Mandatory	Type	Description
bandwidth_type	Yes	String	Bandwidth type. The bandwidth types are as follows: <ul style="list-style-type: none"> • BandwidthPackage: A global private bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global private bandwidth. • TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.
global_connection_bandwidth_id	No	String	Global connection bandwidth ID.
bandwidth_size	No	Integer	Bandwidth range, in Mbit/s.

Response Parameters

Status code: 202

Table 4-417 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
central_network_connection	CentralNetworkConnection object	Connection on the central network.

Table 4-418 CentralNetworkConnection

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.

Parameter	Type	Description
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
enterprise_project_id	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
central_network_id	String	Central network ID.
central_network_plane_id	String	ID of the central network plane.
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_type	String	Bandwidth type. The bandwidth types are as follows: <ul style="list-style-type: none"> • BandwidthPackage: A global private bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global private bandwidth. • TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.
bandwidth_size	Integer	Bandwidth range, in Mbit/s.

Parameter	Type	Description
state	String	<p>Central network connection status.</p> <ul style="list-style-type: none"> ● AVAILABLE: The connection is available. ● CREATING: The connection is being created. ● UPDATING: The connection is being updated. ● DELETING: The connection is being deleted. ● FREEZING: The connection is being frozen. ● UNFREEZING: The connection is being unfrozen. ● RECOVERING: The connection is being recovered. ● FAILED: The operation on the connection failed. ● DELETED: The connection is deleted. ● APPROVING: The connection is being approved. ● APPROVED: The connection is approved. ● UNAPPROVED: The approval failed.
is_frozen	Boolean	Whether the resource is frozen.
connection_type	String	<p>Type of a central network connection.</p> <ul style="list-style-type: none"> ● ER-ER: connections between enterprise routers ● ER-GDGW: connections between enterprise routers and global DC gateways ● ER-ER_ROUTE_TABLE: connections between enterprise routers and route tables of other enterprise routers
connection_point_pair	Array of ConnectionPoint objects	<p>Both ends of a central network connection. The length is fixed to an array of 2.</p> <p>Array Length: 2 - 2</p>
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.

Table 4-419 ConnectionPoint

Parameter	Type	Description
id	String	Resource ID.
project_id	String	Project ID.
region_id	String	Region ID.
site_code	String	Site code definition.
instance_id	String	Resource ID.
type	String	Type of a central network connection point. <ul style="list-style-type: none"> ● ER: an enterprise router ● GDGW: a global DC gateway ● ER_ROUTE_TABLE: an enterprise router route table

Example Requests

Modifying the bandwidth of a central network connection

```
PUT /v3/{domain_id}/gcn/central-network/{central_network_id}/connections
```

```
{
  "central_network_connection" : {
    "bandwidth_type" : "BandwidthPackage",
    "global_connection_bandwidth_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "bandwidth_size" : 20
  }
}
```

Example Responses

Status code: 202

The bandwidth of a central network connection has been modified.

```
{
  "request_id" : "e108915cd5de228ef252be95ce6ef2c2",
  "central_network_connection" : {
    "id" : "eb350a5c-06c1-4b12-9ae4-3820f31faaa0",
    "name" : "er-connection",
    "domain_id" : "XXX",
    "enterprise_project_id" : "0",
    "central_network_id" : "43ad756e-2780-463e-a8ed-27a5bd77b7a7",
    "central_network_plane_id" : "238f60d5-ed1a-4508-8473-45509c530c8f",
    "bandwidth_type" : "TestBandwidth",
    "state" : "UPDATING",
    "is_frozen" : false,
    "connection_type" : "ER-ER",
    "connection_point_pair" : [ {
      "id" : "1c233723-234c-4b50-8fba-7072b4c6aa1a",
      "project_id" : "XXX",
      "region_id" : "cn-north-4",
      "site_code" : "cn-north-4",
      "instance_id" : "d238dd85-f769-485b-aa05-d20e1d3889df",
      "type" : "ER"
    }, {

```

```
"id" : "8641d7f0-bd0c-49fe-8b70-3649cd7dd9b1",
"project_id" : "XXX",
"region_id" : "cn-north-1",
"site_code" : "cn-north-1",
"instance_id" : "96abbb18-4a77-4103-aa8e-b1c836154282",
"type" : "ER"
}],
"created_at" : "2023-10-09T08:02:43.31Z",
"updated_at" : "2023-10-09T08:02:43.307Z"
}
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Modifying the bandwidth of a central network connection

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class UpdateCentralNetworkConnectionSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdateCentralNetworkConnectionRequest request = new UpdateCentralNetworkConnectionRequest();
        UpdateCentralNetworkConnectionRequestBody body = new
        UpdateCentralNetworkConnectionRequestBody();
        UpdateCentralNetworkConnection centralNetworkConnectionbody = new
        UpdateCentralNetworkConnection();
        centralNetworkConnectionbody.withGlobalConnectionBandwidthId("a3bad420-33b8-4e26-9e9b-
        bdf67aa8e72b")
            .withBandwidthType(UpdateCentralNetworkConnection.BandwidthTypeEnum.fromValue("Bandwidth
        Package"))
            .withBandwidthSize(20L);
        body.withCentralNetworkConnection(centralNetworkConnectionbody);
        request.withBody(body);
        try {
            UpdateCentralNetworkConnectionResponse response =
            client.updateCentralNetworkConnection(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

Modifying the bandwidth of a central network connection

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = UpdateCentralNetworkConnectionRequest()
        centralNetworkConnectionbody = UpdateCentralNetworkConnection(
            global_connection_bandwidth_id="a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
            bandwidth_type="BandwidthPackage",
            bandwidth_size=20
        )
        request.body = UpdateCentralNetworkConnectionRequestBody(
            central_network_connection=centralNetworkConnectionbody
        )
        response = client.update_central_network_connection(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

Modifying the bandwidth of a central network connection

```
package main

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

```

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateCentralNetworkConnectionRequest{}
    globalConnectionBandwidthIdCentralNetworkConnection:= "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b"
    bandwidthTypeCentralNetworkConnection:=
model.GetUpdateCentralNetworkConnectionBandwidthTypeEnum().BANDWIDTH_PACKAGE
    bandwidthSizeCentralNetworkConnection:= int64(20)
    centralNetworkConnectionbody := &model.UpdateCentralNetworkConnection{
        GlobalConnectionBandwidthId: &globalConnectionBandwidthIdCentralNetworkConnection,
        BandwidthType: &bandwidthTypeCentralNetworkConnection,
        BandwidthSize: &bandwidthSizeCentralNetworkConnection,
    }
    request.Body = &model.UpdateCentralNetworkConnectionRequestBody{
        CentralNetworkConnection: centralNetworkConnectionbody,
    }
    response, err := client.UpdateCentralNetworkConnection(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
202	The bandwidth of a central network connection has been modified.

Error Codes

See [Error Codes](#).

4.10 Cloud Connection Quotas

4.10.1 Querying Cloud Connection Resource Quotas

Function

This API is used to query cloud connection resource quotas.

Calling Method

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

URI

GET /v3/{domain_id}/ccaas/quotas

Table 4-420 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Table 4-421 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 1000 Minimum: 1 Maximum: 1000 Default: 1000

Parameter	Mandatory	Type	Description
marker	No	String	<p>Pagination query information. You can obtain the marker values from the response of the last API call. You can enter the marker value of the previous page or the next page. If you enter the marker value of the previous page, the previous page will be queried. If you enter the marker value of the next page, the next page will be queried. During pagination query, the query criteria, including the filters, sorting criteria, and the limit value, cannot be modified.</p> <p>Minimum: 1 Maximum: 4096</p>
quota_type	Yes	String	<p>Quota type.</p> <ul style="list-style-type: none">● cloud_connection: the number of cloud connections● cloud_connection_region: the number of regions where a cloud connection can be used● cloud_connection_route: the number of routes that can be added to a cloud connection● region_network_instance: the number of network instances that can be loaded to a cloud connection in a region <p>Minimum: 0 Maximum: 36</p>

Parameter	Mandatory	Type	Description
cloud_connection_id	No	String	Cloud connection ID. This parameter is mandatory when you query the value of each of the three parameters: cloud_connection_region , cloud_connection_route , and region_network_instance . Minimum: 0 Maximum: 36
region_id	No	String	Region ID. This parameter is mandatory when you query the value of region_network_instance . Minimum: 0 Maximum: 36

Request Parameters

Table 4-422 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 200

Table 4-423 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
quotas	Array of CloudConnectionQuota objects	Quota list. Array Length: 0 - 2000

Table 4-424 CloudConnectionQuota

Parameter	Type	Description
domain_id	String	ID of the account that the instance belongs to.
cloud_connection_id	String	Resource ID.
region_id	String	Region ID.
quota_type	String	Quota type. <ul style="list-style-type: none">● cloud_connection: the number of cloud connections● cloud_connection_region: the number of regions where a cloud connection can be used● cloud_connection_route: the number of routes that can be added to a cloud connection● region_network_instance: the number of network instances that can be loaded to a cloud connection in a region
quota_number	Integer	Total quotas. Minimum: 0 Maximum: 102400
quota_used	Integer	Used quotas. Minimum: 0 Maximum: 102400

Example Requests

Querying resource quotas

```
GET https://{cc_endpoint}/v3/{domain_id}/ccaas/quotas?quota_type=cloud_connection
```

Example Responses

Status code: 200

The Cloud Connect resource quotas have been queried.

```
{
  "request_id": "XXX",
  "quotas": [ {
    "domain_id": "XXX",
    "quota_type": "cloud_connection",
    "quota_number": 6,
    "quota_used": 3
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class ListCloudConnectionQuotasSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ListCloudConnectionQuotasRequest request = new ListCloudConnectionQuotasRequest();

        request.withQuotaType(ListCloudConnectionQuotasRequest.QuotaTypeEnum.fromValue("<quota_type>"));
        request.withCloudConnectionId("<cloud_connection_id>");
        request.withRegionId("<region_id>");
        request.withLimit("<limit>");
        request.withMarker("<marker>");
        try {
            ListCloudConnectionQuotasResponse response = client.listCloudConnectionQuotas(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
```

```
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ListCloudConnectionQuotasRequest()
        request.quota_type = "<quota_type>"
        request.cloud_connection_id = "<cloud_connection_id>"
        request.region_id = "<region_id>"
        request.limit = <limit>
        request.marker = "<marker>"
        response = client.list_cloud_connection_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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListCloudConnectionQuotasRequest{}
    request.QuotaType = model.GetListCloudConnectionQuotasRequestQuotaTypeEnum().<QUOTA_TYPE>
    cloudConnectionIdRequest := "<cloud_connection_id>"
    request.CloudConnectionId = &cloudConnectionIdRequest
```

```
regionIdRequest:= "<region_id>"
request.RegionId = &regionIdRequest
limitRequest:= int32(<limit>)
request.Limit = &limitRequest
markerRequest:= "<marker>"
request.Marker = &markerRequest
response, err := client.ListCloudConnectionQuotas(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The Cloud Connect resource quotas have been queried.

Error Codes

See [Error Codes](#).

4.11 Central Network Quotas

4.11.1 Querying Central Network Resource Quotas

Function

This API is used to query the resource quotas.

Calling Method

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

URI

GET /v3/{domain_id}/gcn/quotas

Table 4-425 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Table 4-426 Query Parameters

Parameter	Mandatory	Type	Description
quota_type	No	Array	Quota type. Multiple quota types can be queried. Array Length: 1 - 20
limit	No	Integer	Number of records on each page. Value range: 1 to 1000 Minimum: 1 Maximum: 1000 Default: 1000
marker	No	String	Pagination query information. You can obtain the marker values from the response of the last API call. You can enter the marker value of the previous page or the next page. If you enter the marker value of the previous page, the previous page will be queried. If you enter the marker value of the next page, the next page will be queried. During pagination query, the query criteria, including the filters, sorting criteria, and the limit value, cannot be modified. Minimum: 1 Maximum: 4096

Request Parameters

Table 4-427 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 200

Table 4-428 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
quotas	Array of CentralNetworkQuota objects	Quota list. Array Length: 0 - 2000

Table 4-429 CentralNetworkQuota

Parameter	Type	Description
quota_key	String	Central network quota type.- central_networks_per_account : number of central networks per account- policy_versions_per_central_network : number of policies per central network- size_of_document_per_central_network_policy_version : size of the central network policy document, in KB- planes_per_central_network : number of planes per central network- er_instances_per_region_per_central_network : number of enterprise routers that can be added to each central network as attachments in each region- connections_per_central_network : number of connections per central network- attachments_per_central_network : number of attachments per central network- GDGW_attachments_per_region_per_central_network : number of global DC gateways that can be added to each central network as attachments in each region- ER_ROUTE_TABLE_attachments_per_region_per_central_network : number of enterprise router route table attachments on each central network in each region
quota_limit	Integer	Quotas. Minimum: 0 Maximum: 2147483647
used	Integer	Used quotas. Minimum: 0 Maximum: 2147483647
unit	String	Unit of the quota value. Minimum: 0 Maximum: 255

Example Requests

Querying resource quotas

```
GET https://{cc_endpoint}/v3/{domain_id}/gcn/quotas
```

Example Responses

Status code: 200

The central network resource quotas have been queried.

```
{
  "request_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "quotas" : [ {
    "quota_key" : "central_networks_per_account",
    "quota_limit" : 6,
    "used" : 0,
    "unit" : "count"
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListCentralNetworkQuotasSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ListCentralNetworkQuotasRequest request = new ListCentralNetworkQuotasRequest();
        request.withQuotaType();
        request.withLimit(<limit>);
        request.withMarker("<marker>");
        try {
            ListCentralNetworkQuotasResponse response = client.listCentralNetworkQuotas(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  
  
from huaweicloudsdkcore.auth.credentials import GlobalCredentials  
from huaweicloudsdkcc.v3.region.cc_region import CcRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")  
    sk = __import__('os').getenv("CLOUD_SDK_SK")  
  
    credentials = GlobalCredentials(ak, sk) \  
  
    client = CcClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(CcRegion.value_of("<YOUR REGION>")) \  
        .build()  
  
    try:  
        request = ListCentralNetworkQuotasRequest()  
        request.quota_type =  
        request.limit = <limit>  
        request.marker = "<marker>"  
        response = client.list_central_network_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/global"  
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")  
  
    auth := global.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        Build()  
  
    client := cc.NewCcClient(  

```

```

cc.CcClientBuilder().
  WithRegion(region.ValueOf("<YOUR REGION>")).
  WithCredential(auth).
  Build()

request := &model.ListCentralNetworkQuotasRequest{}
limitRequest:= int32(<limit>)
request.Limit = &limitRequest
markerRequest:= "<marker>"
request.Marker = &markerRequest
response, err := client.ListCentralNetworkQuotas(request)
if err == nil {
  fmt.Printf("%+v\n", response)
} else {
  fmt.Println(err)
}
}

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The central network resource quotas have been queried.

Error Codes

See [Error Codes](#).

4.12 Central Network Capabilities

4.12.1 Querying Central Network Capabilities

Function

This API is used to query the central network capabilities.

Calling Method

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

URI

GET /v3/{domain_id}/gcn/capabilities

Table 4-430 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Table 4-431 Query Parameters

Parameter	Mandatory	Type	Description
capability	No	Array	Capabilities. Multiple capabilities can be queried. Array Length: 1 - 20

Request Parameters

Table 4-432 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 200

Table 4-433 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
capabilities	Array of CentralNetworkCapability objects	List of central network capabilities. Array Length: 0 - 2000

Table 4-434 CentralNetworkCapability

Parameter	Type	Description
id	String	Resource ID.
domain_id	String	ID of the account that the instance belongs to.

Parameter	Type	Description
capability	String	<p>Capability types.</p> <ul style="list-style-type: none"> ● central-network.is-support: central networks ● central-network.is-support-enterprise-project: enterprise projects for central networks ● central-network.is-support-tag: central network tags ● central-network.is-support-custom-er-table: custom route tables on central networks ● connection-bandwidth.size-range: bandwidth range for a cross-site connection ● connection-bandwidth.charge-mode: billing mode of the global private bandwidth for assigning cross-site connection bandwidths ● er-instance.support-regions: list of the regions where Enterprise Router is available ● er-instance.support-ipv6-regions: list of the regions where Enterprise Router supports IPv6 ● er-instance.support-dscp-regions: list of the regions that support gold, silver, and bronze global private bandwidths ● er-instance.support-sts5-regions: list of regions where sts5 can make API calls to Enterprise Router ● er-instance.support-sites: list of the sites where Enterprise Router is available ● gdgw-attachment.is-support: global DC gateways as attachments ● gdgw-attachment.support-regions: list of the regions where global DC gateways are available ● gdgw-attachment.support-sites: list of the sites where global DC gateways are available ● er-route-table-attachment.is-support: enterprise router route tables as attachments ● er-route-table-attachment.support-regions: list of regions where enterprise router route tables can be added as attachments

Parameter	Type	Description
		<ul style="list-style-type: none"> • er-route-table-attachment.support-sites: list of sites where enterprise router route tables can be added as attachments • cloud-alliance.support-regions: list of regions that support Cloud Alliance

Example Requests

Querying central network capabilities

```
GET https://{cc_endpoint}/v3/gcn/capabilities
```

Example Responses

Status code: 200

The central network capabilities have been queried.

```
{
  "request_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "capabilities" : [ {
    "id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "domain_id" : "XXX",
    "capability" : "central-network.is-support",
    "specifications" : {
      "is_support" : true
    }
  }
  ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListCentralNetworkCapabilitiesSolution {

    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");

ICredential auth = new GlobalCredentials()
    .withAk(ak)
    .withSk(sk);

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

ListCentralNetworkCapabilitiesRequest request = new ListCentralNetworkCapabilitiesRequest();
request.withCapability();
try {
    ListCentralNetworkCapabilitiesResponse response = client.listCentralNetworkCapabilities(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ListCentralNetworkCapabilitiesRequest()
        request.capability =
        response = client.list_central_network_capabilities(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The central network capabilities have been queried.

Error Codes

See [Error Codes](#).

4.13 Global Private Bandwidths

4.13.1 Querying the Global Private Bandwidth List

Function

This API is used to query the global private bandwidth list.

Parameters **marker** and **limit** are used for pagination query. The two parameters take effect only when they are used together.

Calling Method

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

URI

GET /v3/{domain_id}/gcb/gcbbandwidths

Table 4-435 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Table 4-436 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 1000 Minimum: 1 Maximum: 1000 Default: 1000

Parameter	Mandatory	Type	Description
marker	No	String	<p>Pagination query information. You can obtain the marker values from the response of the last API call. You can enter the marker value of the previous page or the next page. If you enter the marker value of the previous page, the previous page will be queried. If you enter the marker value of the next page, the next page will be queried. During pagination query, the query criteria, including the filters, sorting criteria, and the limit value, cannot be modified.</p> <p>Minimum: 1 Maximum: 4096</p>
id	No	Array	<p>Resource ID. Multiple IDs can be queried.</p> <p>Array Length: 1 - 20</p>
name	No	Array	<p>Resource name. Multiple names can be queried.</p> <p>Array Length: 1 - 20</p>
enterprise_project_id	No	Array	<p>Enterprise project IDs.</p> <p>Array Length: 1 - 20</p>
instance_id	No	Array	<p>Bound instance ID used for listing global private bandwidths.</p> <p>Array Length: 1 - 10</p>
instance_type	No	Array	<p>Instance type used for listing global private bandwidths.</p> <ul style="list-style-type: none"> ● Cloud Connect: cloud connection ● GEIP: Global EIP ● GCN: central network ● GSN: site network <p>Array Length: 1 - 10</p>

Parameter	Mandatory	Type	Description
binding_service	No	Array	Instance type used for listing global private bandwidths. <ul style="list-style-type: none">● Cloud Connect: cloud connection● GEIP: Global EIP● GCN: central network● GSN: site network Array Length: 1 - 10
type	No	Array	Bandwidth type used for listing global private bandwidths. <ul style="list-style-type: none">● TrsArea: cross-geographic-region bandwidth● Area: geographic-region bandwidth● SubArea: region bandwidth● Region: multi-city bandwidth Array Length: 1 - 10
admin_state	No	Array	Status used for listing global private bandwidths. <ul style="list-style-type: none">● NORMAL: The global private bandwidth is available.● FREEZED: The global private bandwidth is frozen. Array Length: 1 - 10
charge_mode	No	Array	Billing option used for listing global private bandwidths. <ul style="list-style-type: none">● bwd: billing by bandwidth● 95: standard 95th percentile bandwidth billing Array Length: 1 - 10

Request Parameters

Table 4-437 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 200

Table 4-438 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
page_info	PageInfo object	Pagination query information.
globalconnection_bandwidths	Array of GlobalConnectionBandwidth objects	Response body for querying the global private bandwidth list. Array Length: 1 - 2000

Table 4-439 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier. Minimum: 1 Maximum: 4096
previous_marker	String	Forward pagination identifier. Minimum: 1 Maximum: 4096
current_count	Integer	Number of the resources in the current list. Minimum: 0 Maximum: 2000

Table 4-440 GlobalConnectionBandwidth

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
bordercross	Boolean	Whether the global private bandwidth is used for cross-border communications (between the Chinese mainland and a country/region outside the Chinese mainland). <ul style="list-style-type: none">• True: cross-border communications• False: non-cross-border communications
type	String	Type of a global private bandwidth. <ul style="list-style-type: none">• TrsArea: cross-geographic-region bandwidth• Area: geographic-region bandwidth• SubArea: region bandwidth• Region: multi-city bandwidth
binding_service	String	Instance type. <ul style="list-style-type: none">• Cloud Connect: cloud connection• GEIP: Global EIP• GCN: central network• GSN: site network• ALL: all instance types
enterprise_project_id	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
charge_mode	String	Billing option. By default, billing by bandwidth is enabled. Standard 95th percentile bandwidth billing is controlled using a whitelist. <ul style="list-style-type: none">• bwd: billing by bandwidth• 95: standard 95th percentile bandwidth billing

Parameter	Type	Description
size	Integer	Range of a global private bandwidth, in Mbit/s. Bandwidth range: 2 Mbit/s to 300 Mbit/s Minimum: 2 Maximum: 300
sla_level	String	Class of a global private bandwidth. There are three classes: platinum, gold, and silver. The default class is gold. Other options are controlled by whitelists. <ul style="list-style-type: none"> ● Pt: platinum ● Au: gold ● Ag: silver Default: Au Minimum: 1 Maximum: 36
local_area	String	Name of a local access point. The x-language parameter in the header is used to control the language. The default language is English. zh-cn indicates Chinese. Minimum: 1 Maximum: 36
remote_area	String	Name of a remote access point. The x-language parameter in the header is used to control the language. The default language is English. zh-cn indicates Chinese. Minimum: 1 Maximum: 36
local_site_code	String	Code of the local access point. Minimum: 1 Maximum: 36
remote_site_code	String	Code of s remote access point. Minimum: 1 Maximum: 36
admin_state	String	Global private bandwidth status. <ul style="list-style-type: none"> ● NORMAL: The bandwidth is normal. ● FREZZED: The bandwidth is frozen.
frozen	Boolean	Whether a global private bandwidth is frozen. <ul style="list-style-type: none"> ● true: The bandwidth is frozen. ● false: The bandwidth is not frozen.

Parameter	Type	Description
spec_code_id	String	UUID of a line specification code. Minimum: 1 Maximum: 36
tags	Array of Tag objects	Resource tags. Array Length: 1 - 20
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
enable_share	Boolean	Whether a global private bandwidth can be used by multiple instances. <ul style="list-style-type: none"> • true: The bandwidth can be used by multiple instances. • false: The bandwidth cannot be used by multiple instances.
instances	Array of GlobalConnectionBandwidthAssociateInstance objects	The list of instances that the global private bandwidth is bound to. Array Length: 0 - 200

Table 4-441 Tag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Table 4-442 GlobalConnectionBandwidthAssociatedInstance

Parameter	Type	Description
id	String	Bound instance ID. Minimum: 0 Maximum: 36
type	String	Bound instance type. Minimum: 0 Maximum: 36
region_id	String	Region of the bound instance. The default value is global for global services. Minimum: 0 Maximum: 36
project_id	String	Project ID of the bound instance. Minimum: 0 Maximum: 36

Example Requests

Querying the global private bandwidth list

```
GET https://{cc_endpoint}/v3/{domain_id}/gcb/gcbandwidths
```

Example Responses

Status code: 200

The global private bandwidth list has been queried.

```
{
  "request_id": "61126320a1802d5c6444f9d2d76526c2",
  "globalconnection_bandwidths": [ {
    "id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "name": "name",
    "description": "description",
    "domain_id": "521bb3d98bed4c6c9ee8669bd0620f76",
    "bordercross": false,
    "type": "Region",
    "binding_service": "CC",
    "enterprise_project_id": "0c478f9e-73a4-4c45-b9bc-b2c3bfc0d4c0",
    "charge_mode": "bwd",
    "size": 100,
    "sla_level": "Au",
    "local_site_code": "cn-south-guangzhou",
    "remote_site_code": "cn-north-beijing4",
    "frozen": false,
    "spec_code_id": "",
    "tags": [ ],
    "created_at": "2024-01-24T08:26:41.914Z",
    "updated_at": "2024-01-24T08:26:41.914Z",
    "enable_share": false,
    "instances": [ ]
  } ],
}
```

```
"page_info" : {  
  "next_marker" : "XXX",  
  "previous_marker" : "XXX",  
  "current_count" : 1  
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.GlobalCredentials;  
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.cc.v3.region.CcRegion;  
import com.huaweicloud.sdk.cc.v3.*;  
import com.huaweicloud.sdk.cc.v3.model.*;  
  
import java.util.List;  
import java.util.ArrayList;  
  
public class ListGlobalConnectionBandwidthsSolution {  
  
    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");  
  
        ICredential auth = new GlobalCredentials()  
            .withAk(ak)  
            .withSk(sk);  
  
        CcClient client = CcClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ListGlobalConnectionBandwidthsRequest request = new ListGlobalConnectionBandwidthsRequest();  
        request.withBindingService();  
        request.withType();  
        request.withChargeMode();  
        request.withLimit(<limit>);  
        request.withMarker("<marker>");  
        request.withId();  
        request.withName();  
        request.withEnterpriseProjectId();  
        try {  
            ListGlobalConnectionBandwidthsResponse response =  
client.listGlobalConnectionBandwidths(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ListGlobalConnectionBandwidthsRequest()
        request.binding_service =
        request.type =
        request.charge_mode =
        request.limit = <limit>
        request.marker = "<marker>"
        request.id =
        request.name =
        request.enterprise_project_id =
        response = client.list_global_connection_bandwidths(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")
```

```
auth := global.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    Build()

client := cc.NewCcClient(
    cc.CcClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ListGlobalConnectionBandwidthsRequest{
    limitRequest:= int32(<limit>)
    request.Limit = &limitRequest
    markerRequest:= "<marker>"
    request.Marker = &markerRequest
    response, err := client.ListGlobalConnectionBandwidths(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The global private bandwidth list has been queried.

Error Codes

See [Error Codes](#).

4.13.2 Creating a Global Private Bandwidth

Function

This API is used to create a global private bandwidth.

Calling Method

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

URI

POST /v3/{domain_id}/gcb/gcbbandwidths

Table 4-443 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Request Parameters

Table 4-444 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-445 Request body parameters

Parameter	Mandatory	Type	Description
globalconnection_bandwidth	Yes	CreateGlobalConnectionBandwidth object	Detailed information about a global private bandwidth.

Table 4-446 CreateGlobalConnectionBandwidth

Parameter	Mandatory	Type	Description
name	Yes	String	Resource name.
description	No	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255

Parameter	Mandatory	Type	Description
bordercross	Yes	Boolean	Whether the global private bandwidth is used for cross-border communications (between the Chinese mainland and a country/region outside the Chinese mainland). <ul style="list-style-type: none"> • True: cross-border communications • False: non-cross-border communications
type	Yes	String	Type of a global private bandwidth. <ul style="list-style-type: none"> • TrsArea: cross-geographic-region bandwidth • Area: geographic-region bandwidth • SubArea: region bandwidth • Region: multi-city bandwidth
enterprise_project_id	No	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
tags	No	Array of Tag objects	Resource tags. Array Length: 1 - 20
charge_mode	Yes	String	Billing option. By default, billing by bandwidth is enabled. Standard 95th percentile bandwidth billing is controlled using a whitelist. <ul style="list-style-type: none"> • bwd: billing by bandwidth • 95: standard 95th percentile bandwidth billing
size	Yes	Integer	Range of a global private bandwidth, in Mbit/s. Bandwidth range: 2 Mbit/s to 300 Mbit/s Minimum: 2 Maximum: 300

Parameter	Mandatory	Type	Description
sla_level	No	String	<p>Class of a global private bandwidth. There are three classes: platinum, gold, and silver. The default class is gold. Other options are controlled by whitelists.</p> <ul style="list-style-type: none"> • Pt: platinum • Au: gold • Ag: silver <p>Default: Au Minimum: 1 Maximum: 36</p>
local_area	No	String	<p>Local access point. This parameter is used together with remote_area to describe the applicability of a global private bandwidth. The value can contain 1 to 64 characters, including digits, letters, underscores (_), hyphens (-), and periods (.). The site code is obtained through API calls. If the bandwidth type is Region, this parameter is optional. For other types, this parameter is mandatory.</p> <p>Minimum: 1 Maximum: 36</p>
remote_area	No	String	<p>Remote access point. This parameter is used together with local_area to describe the applicability of a global private bandwidth. The value can contain 1 to 64 characters, including digits, letters, underscores (_), hyphens (-), and periods (.). The site code is obtained through API calls. If the bandwidth type is Region, this parameter is optional. For other types, this parameter is mandatory.</p> <p>Minimum: 1 Maximum: 36</p>

Parameter	Mandatory	Type	Description
spec_code_id	No	String	UUID of a line specification code. Minimum: 1 Maximum: 36

Table 4-447 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	No	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Response Parameters

Status code: 201

Table 4-448 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
globalconnection_bandwidth	GlobalConnectionBandwidth object	Detailed information about a global private bandwidth.

Table 4-449 GlobalConnectionBandwidth

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.

Parameter	Type	Description
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
bordercross	Boolean	Whether the global private bandwidth is used for cross-border communications (between the Chinese mainland and a country/region outside the Chinese mainland). <ul style="list-style-type: none"> • True: cross-border communications • False: non-cross-border communications
type	String	Type of a global private bandwidth. <ul style="list-style-type: none"> • TrsArea: cross-geographic-region bandwidth • Area: geographic-region bandwidth • SubArea: region bandwidth • Region: multi-city bandwidth
binding_service	String	Instance type. <ul style="list-style-type: none"> • Cloud Connect: cloud connection • GEIP: Global EIP • GCN: central network • GSN: site network • ALL: all instance types
enterprise_project_id	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
charge_mode	String	Billing option. By default, billing by bandwidth is enabled. Standard 95th percentile bandwidth billing is controlled using a whitelist. <ul style="list-style-type: none"> • bwd: billing by bandwidth • 95: standard 95th percentile bandwidth billing
size	Integer	Range of a global private bandwidth, in Mbit/s. Bandwidth range: 2 Mbit/s to 300 Mbit/s Minimum: 2 Maximum: 300

Parameter	Type	Description
sla_level	String	Class of a global private bandwidth. There are three classes: platinum, gold, and silver. The default class is gold. Other options are controlled by whitelists. <ul style="list-style-type: none"> • Pt: platinum • Au: gold • Ag: silver Default: Au Minimum: 1 Maximum: 36
local_area	String	Name of a local access point. The x-language parameter in the header is used to control the language. The default language is English. zh-cn indicates Chinese. Minimum: 1 Maximum: 36
remote_area	String	Name of a remote access point. The x-language parameter in the header is used to control the language. The default language is English. zh-cn indicates Chinese. Minimum: 1 Maximum: 36
local_site_code	String	Code of the local access point. Minimum: 1 Maximum: 36
remote_site_code	String	Code of s remote access point. Minimum: 1 Maximum: 36
admin_state	String	Global private bandwidth status. <ul style="list-style-type: none"> • NORMAL: The bandwidth is normal. • FREZED: The bandwidth is frozen.
frozen	Boolean	Whether a global private bandwidth is frozen. <ul style="list-style-type: none"> • true: The bandwidth is frozen. • false: The bandwidth is not frozen.
spec_code_id	String	UUID of a line specification code. Minimum: 1 Maximum: 36

Parameter	Type	Description
tags	Array of Tag objects	Resource tags. Array Length: 1 - 20
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
enable_share	Boolean	Whether a global private bandwidth can be used by multiple instances. <ul style="list-style-type: none"> • true: The bandwidth can be used by multiple instances. • false: The bandwidth cannot be used by multiple instances.
instances	Array of GlobalConnectionBandwidthAssociatedInstance objects	The list of instances that the global private bandwidth is bound to. Array Length: 0 - 200

Table 4-450 Tag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Table 4-451 GlobalConnectionBandwidthAssociatedInstance

Parameter	Type	Description
id	String	Bound instance ID. Minimum: 0 Maximum: 36

Parameter	Type	Description
type	String	Bound instance type. Minimum: 0 Maximum: 36
region_id	String	Region of the bound instance. The default value is global for global services. Minimum: 0 Maximum: 36
project_id	String	Project ID of the bound instance. Minimum: 0 Maximum: 36

Example Requests

- Creating a multi-city bandwidth

POST https://{cc_endpoint}/v3/{domain_id}/gcb/gcbbandwidths

```
{
  "globalconnection_bandwidth" : {
    "name" : "test_region",
    "description" : "Description",
    "bordercross" : false,
    "type" : "Region",
    "charge_mode" : "bwd",
    "size" : 5
  }
}
```

- Creating a geographic-region bandwidth

POST https://{cc_endpoint}/v3/{domain_id}/gcb/gcbbandwidth

```
{
  "globalconnection_bandwidth" : {
    "name" : "test_area",
    "description" : "Description",
    "bordercross" : false,
    "type" : "Area",
    "charge_mode" : "bwd",
    "size" : 5,
    "local_area" : "cn-north-beijing4",
    "remote_area" : "cn-south-guangzhou"
  }
}
```

Example Responses

Status code: 201

The global private bandwidth has been created.

```
{
  "request_id" : "1b90e4762e3090961a30ca3a712dc0ed",
  "globalconnection_bandwidth" : {
    "id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "name" : "name",
    "description" : "description",
```

```
"domain_id" : "521bb3d98bed4c6c9ee8669bd0620f76",
"bordercross" : false,
"type" : "Region",
"binding_service" : "CC",
"enterprise_project_id" : "0c478f9e-73a4-4c45-b9bc-b2c3bfc0d4c0",
"charge_mode" : "bwd",
"size" : 100,
"sla_level" : "Au",
"local_site_code" : "cn-south-guangzhou",
"remote_site_code" : "cn-north-beijing4",
"frozen" : false,
"spec_code_id" : "",
"tags" : [],
"created_at" : "2024-01-24T08:26:41.914Z",
"updated_at" : "2024-01-24T08:26:41.914Z",
"enable_share" : false,
"instances" : []
}
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

- Creating a multi-city bandwidth

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class CreateGlobalConnectionBandwidthSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateGlobalConnectionBandwidthRequest request = new
        CreateGlobalConnectionBandwidthRequest();
        CreateGlobalConnectionBandwidthRequestBody body = new
        CreateGlobalConnectionBandwidthRequestBody();
        CreateGlobalConnectionBandwidth globalconnectionBandwidthbody = new
        CreateGlobalConnectionBandwidth();
        globalconnectionBandwidthbody.withSize(5)
            .withName("test_region")
    }
}
```

```
        .withDescription("Description")
        .withChargeMode(CreateGlobalConnectionBandwidth.ChargeModeEnum.fromValue("bwd"))
        .withType(CreateGlobalConnectionBandwidth.TypeEnum.fromValue("Region"))
        .withBordercross(false);
body.withGlobalconnectionBandwidth(globalconnectionBandwidthbody);
request.withBody(body);
try {
    CreateGlobalConnectionBandwidthResponse response =
client.createGlobalConnectionBandwidth(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());
}
}
```

- **Creating a geographic-region bandwidth**

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class CreateGlobalConnectionBandwidthSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateGlobalConnectionBandwidthRequest request = new
        CreateGlobalConnectionBandwidthRequest();
        CreateGlobalConnectionBandwidthRequestBody body = new
        CreateGlobalConnectionBandwidthRequestBody();
        CreateGlobalConnectionBandwidth globalconnectionBandwidthbody = new
        CreateGlobalConnectionBandwidth();
        globalconnectionBandwidthbody.withSize(5)
            .withName("test_area")
            .withDescription("Description")
            .withChargeMode(CreateGlobalConnectionBandwidth.ChargeModeEnum.fromValue("bwd"))
            .withType(CreateGlobalConnectionBandwidth.TypeEnum.fromValue("Area"))
            .withBordercross(false)
            .withLocalArea("cn-north-beijing4")
    }
}
```



```
        .withRemoteArea("cn-south-guangzhou");
        body.withGlobalconnectionBandwidth(globalconnectionBandwidthbody);
        request.withBody(body);
        try {
            CreateGlobalConnectionBandwidthResponse response =
client.createGlobalConnectionBandwidth(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

- Creating a multi-city bandwidth

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = CreateGlobalConnectionBandwidthRequest()
        globalconnectionBandwidthbody = CreateGlobalConnectionBandwidth(
            size=5,
            name="test_region",
            description="Description",
            charge_mode="bwd",
            type="Region",
            bordercross=False
        )
        request.body = CreateGlobalConnectionBandwidthRequestBody(
            globalconnection_bandwidth=globalconnectionBandwidthbody
        )
        response = client.create_global_connection_bandwidth(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

- Creating a geographic-region bandwidth

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = CreateGlobalConnectionBandwidthRequest()
        globalconnectionbandwidthbody = CreateGlobalConnectionBandwidth(
            size=5,
            name="test_area",
            description="Description",
            charge_mode="bwd",
            type="Area",
            bordercross=False,
            local_area="cn-north-beijing4",
            remote_area="cn-south-guangzhou"
        )
        request.body = CreateGlobalConnectionBandwidthRequestBody(
            globalconnection_bandwidth=globalconnectionbandwidthbody
        )
        response = client.create_global_connection_bandwidth(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

- Creating a multi-city bandwidth

```
package main

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

auth := global.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    Build()

client := cc.NewCcClient(
    cc.CcClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.CreateGlobalConnectionBandwidthRequest{}
descriptionGlobalconnectionBandwidth:= "Description"
globalconnectionBandwidthbody := &model.CreateGlobalConnectionBandwidth{
    Size: int32(5),
    Name: "test_region",
    Description: &descriptionGlobalconnectionBandwidth,
    ChargeMode: model.GetCreateGlobalConnectionBandwidthChargeModeEnum().BWD,
    Type: model.GetCreateGlobalConnectionBandwidthTypeEnum().REGION,
    Bordercross: false,
}
request.Body = &model.CreateGlobalConnectionBandwidthRequestBody{
    GlobalconnectionBandwidth: globalconnectionBandwidthbody,
}
response, err := client.CreateGlobalConnectionBandwidth(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

- **Creating a geographic-region bandwidth**

```
package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateGlobalConnectionBandwidthRequest{}
    descriptionGlobalconnectionBandwidth:= "Description"
    localAreaGlobalconnectionBandwidth:= "cn-north-beijing4"
```

```

remoteAreaGlobalconnectionBandwidth:= "cn-south-guangzhou"
globalconnectionBandwidthbody := &model.CreateGlobalConnectionBandwidth{
    Size: int32(5),
    Name: "test_area",
    Description: &descriptionGlobalconnectionBandwidth,
    ChargeMode: model.GetCreateGlobalConnectionBandwidthChargeModeEnum().BWD,
    Type: model.GetCreateGlobalConnectionBandwidthTypeEnum().AREA,
    Bordercross: false,
    LocalArea: &localAreaGlobalconnectionBandwidth,
    RemoteArea: &remoteAreaGlobalconnectionBandwidth,
}
request.Body = &model.CreateGlobalConnectionBandwidthRequestBody{
    GlobalconnectionBandwidth: globalconnectionBandwidthbody,
}
response, err := client.CreateGlobalConnectionBandwidth(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
201	The global private bandwidth has been created.

Error Codes

See [Error Codes](#).

4.13.3 Querying a Global Private Bandwidth

Function

This API is used to query the details of a global private bandwidth.

Calling Method

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

URI

GET /v3/{domain_id}/gcb/gcbbandwidths/{id}

Table 4-452 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36

Request Parameters

Table 4-453 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: **200**

Table 4-454 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
globalconnect ion_bandwidth	GlobalConnectionBandwidth object	Detailed information about a global private bandwidth.

Table 4-455 GlobalConnectionBandwidth

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.

Parameter	Type	Description
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
bordercross	Boolean	Whether the global private bandwidth is used for cross-border communications (between the Chinese mainland and a country/region outside the Chinese mainland). <ul style="list-style-type: none"> • True: cross-border communications • False: non-cross-border communications
type	String	Type of a global private bandwidth. <ul style="list-style-type: none"> • TrsArea: cross-geographic-region bandwidth • Area: geographic-region bandwidth • SubArea: region bandwidth • Region: multi-city bandwidth
binding_service	String	Instance type. <ul style="list-style-type: none"> • Cloud Connect: cloud connection • GEIP: Global EIP • GCN: central network • GSN: site network • ALL: all instance types
enterprise_project_id	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
charge_mode	String	Billing option. By default, billing by bandwidth is enabled. Standard 95th percentile bandwidth billing is controlled using a whitelist. <ul style="list-style-type: none"> • bwd: billing by bandwidth • 95: standard 95th percentile bandwidth billing
size	Integer	Range of a global private bandwidth, in Mbit/s. Bandwidth range: 2 Mbit/s to 300 Mbit/s Minimum: 2 Maximum: 300

Parameter	Type	Description
sla_level	String	Class of a global private bandwidth. There are three classes: platinum, gold, and silver. The default class is gold. Other options are controlled by whitelists. <ul style="list-style-type: none"> • Pt: platinum • Au: gold • Ag: silver Default: Au Minimum: 1 Maximum: 36
local_area	String	Name of a local access point. The x-language parameter in the header is used to control the language. The default language is English. zh-cn indicates Chinese. Minimum: 1 Maximum: 36
remote_area	String	Name of a remote access point. The x-language parameter in the header is used to control the language. The default language is English. zh-cn indicates Chinese. Minimum: 1 Maximum: 36
local_site_code	String	Code of the local access point. Minimum: 1 Maximum: 36
remote_site_code	String	Code of s remote access point. Minimum: 1 Maximum: 36
admin_state	String	Global private bandwidth status. <ul style="list-style-type: none"> • NORMAL: The bandwidth is normal. • FREZZED: The bandwidth is frozen.
frozen	Boolean	Whether a global private bandwidth is frozen. <ul style="list-style-type: none"> • true: The bandwidth is frozen. • false: The bandwidth is not frozen.
spec_code_id	String	UUID of a line specification code. Minimum: 1 Maximum: 36

Parameter	Type	Description
tags	Array of Tag objects	Resource tags. Array Length: 1 - 20
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
enable_share	Boolean	Whether a global private bandwidth can be used by multiple instances. <ul style="list-style-type: none"> • true: The bandwidth can be used by multiple instances. • false: The bandwidth cannot be used by multiple instances.
instances	Array of GlobalConnectionBandwidthAssociatedInstance objects	The list of instances that the global private bandwidth is bound to. Array Length: 0 - 200

Table 4-456 Tag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Table 4-457 GlobalConnectionBandwidthAssociatedInstance

Parameter	Type	Description
id	String	Bound instance ID. Minimum: 0 Maximum: 36

Parameter	Type	Description
type	String	Bound instance type. Minimum: 0 Maximum: 36
region_id	String	Region of the bound instance. The default value is global for global services. Minimum: 0 Maximum: 36
project_id	String	Project ID of the bound instance. Minimum: 0 Maximum: 36

Example Requests

Querying a global private bandwidth

```
GET https://{cc_endpoint}/v3/{domain_id}/gcb/gcbbandwidths/{id}
```

Example Responses

Status code: 200

The global private bandwidth details have been queried.

```
{
  "request_id": "1b90e4762e3090961a30ca3a712dc0ed",
  "globalconnection_bandwidth": {
    "id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "name": "name",
    "description": "description",
    "domain_id": "521bb3d98bed4c6c9ee8669bd0620f76",
    "bordercross": false,
    "type": "Region",
    "binding_service": "CC",
    "enterprise_project_id": "0c478f9e-73a4-4c45-b9bc-b2c3bfc0d4c0",
    "charge_mode": "bwd",
    "size": 100,
    "sla_level": "Au",
    "local_site_code": "cn-south-guangzhou",
    "remote_site_code": "cn-north-beijing4",
    "frozen": false,
    "spec_code_id": "",
    "tags": [],
    "created_at": "2024-01-24T08:26:41.914Z",
    "updated_at": "2024-01-24T08:26:41.914Z",
    "enable_share": false,
    "instances": []
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class ShowGlobalConnectionBandwidthSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowGlobalConnectionBandwidthRequest request = new ShowGlobalConnectionBandwidthRequest();
        try {
            ShowGlobalConnectionBandwidthResponse response =
client.showGlobalConnectionBandwidth(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdccc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdccc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")
```

```
credentials = GlobalCredentials(ak, sk) \

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

try:
    request = ShowGlobalConnectionBandwidthRequest()
    response = client.show_global_connection_bandwidth(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The global private bandwidth details have been queried.

Error Codes

See [Error Codes](#).

4.13.4 Updating a Global Private Bandwidth

Function

This API is used to update a global private bandwidth.

Calling Method

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

URI

PUT /v3/{domain_id}/gcb/gcbbandwidths/{id}

Table 4-458 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36

Request Parameters

Table 4-459 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-460 Request body parameters

Parameter	Mandatory	Type	Description
globalconnection_bandwidth	Yes	UpdateGlobalConnectionBandwidth object	Detailed information about a global private bandwidth.

Table 4-461 UpdateGlobalConnectionBandwidth

Parameter	Mandatory	Type	Description
name	No	String	Resource name.
description	No	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
size	No	Integer	Range of a global private bandwidth, in Mbit/s. Bandwidth range: 2 Mbit/s to 300 Mbit/s Minimum: 2 Maximum: 300
charge_mode	No	String	Billing option. By default, billing by bandwidth is enabled. Standard 95th percentile bandwidth billing is controlled using a whitelist. <ul style="list-style-type: none"> • bwd: billing by bandwidth • 95: standard 95th percentile bandwidth billing
sla_level	No	String	Class of a global private bandwidth. There are three classes: platinum, gold, and silver. The default class is gold. Other options are controlled by whitelists. <ul style="list-style-type: none"> • Pt: platinum • Au: gold • Ag: silver Default: Au Minimum: 1 Maximum: 36

Parameter	Mandatory	Type	Description
binding_service	No	String	Instance type. <ul style="list-style-type: none"> • Cloud Connect: cloud connection • GEIP: Global EIP • GCN: central network • GSN: site network • ALL: all instance types
spec_code_id	No	String	UUID of a line specification code. Minimum: 1 Maximum: 36

Response Parameters

Status code: 200

Table 4-462 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
globalconnection_bandwidth	GlobalConnectionBandwidth object	Detailed information about a global private bandwidth.

Table 4-463 GlobalConnectionBandwidth

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.

Parameter	Type	Description
bordercross	Boolean	Whether the global private bandwidth is used for cross-border communications (between the Chinese mainland and a country/region outside the Chinese mainland). <ul style="list-style-type: none"> • True: cross-border communications • False: non-cross-border communications
type	String	Type of a global private bandwidth. <ul style="list-style-type: none"> • TrsArea: cross-geographic-region bandwidth • Area: geographic-region bandwidth • SubArea: region bandwidth • Region: multi-city bandwidth
binding_service	String	Instance type. <ul style="list-style-type: none"> • Cloud Connect: cloud connection • GEIP: Global EIP • GCN: central network • GSN: site network • ALL: all instance types
enterprise_project_id	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
charge_mode	String	Billing option. By default, billing by bandwidth is enabled. Standard 95th percentile bandwidth billing is controlled using a whitelist. <ul style="list-style-type: none"> • bwd: billing by bandwidth • 95: standard 95th percentile bandwidth billing
size	Integer	Range of a global private bandwidth, in Mbit/s. Bandwidth range: 2 Mbit/s to 300 Mbit/s Minimum: 2 Maximum: 300

Parameter	Type	Description
sla_level	String	Class of a global private bandwidth. There are three classes: platinum, gold, and silver. The default class is gold. Other options are controlled by whitelists. <ul style="list-style-type: none">● Pt: platinum● Au: gold● Ag: silver Default: Au Minimum: 1 Maximum: 36
local_area	String	Name of a local access point. The x-language parameter in the header is used to control the language. The default language is English. zh-cn indicates Chinese. Minimum: 1 Maximum: 36
remote_area	String	Name of a remote access point. The x-language parameter in the header is used to control the language. The default language is English. zh-cn indicates Chinese. Minimum: 1 Maximum: 36
local_site_code	String	Code of the local access point. Minimum: 1 Maximum: 36
remote_site_code	String	Code of s remote access point. Minimum: 1 Maximum: 36
admin_state	String	Global private bandwidth status. <ul style="list-style-type: none">● NORMAL: The bandwidth is normal.● FREZED: The bandwidth is frozen.
frozen	Boolean	Whether a global private bandwidth is frozen. <ul style="list-style-type: none">● true: The bandwidth is frozen.● false: The bandwidth is not frozen.
spec_code_id	String	UUID of a line specification code. Minimum: 1 Maximum: 36

Parameter	Type	Description
tags	Array of Tag objects	Resource tags. Array Length: 1 - 20
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
enable_share	Boolean	Whether a global private bandwidth can be used by multiple instances. <ul style="list-style-type: none"> • true: The bandwidth can be used by multiple instances. • false: The bandwidth cannot be used by multiple instances.
instances	Array of GlobalConnectionBandwidthAssociatedInstance objects	The list of instances that the global private bandwidth is bound to. Array Length: 0 - 200

Table 4-464 Tag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Table 4-465 GlobalConnectionBandwidthAssociatedInstance

Parameter	Type	Description
id	String	Bound instance ID. Minimum: 0 Maximum: 36

Parameter	Type	Description
type	String	Bound instance type. Minimum: 0 Maximum: 36
region_id	String	Region of the bound instance. The default value is global for global services. Minimum: 0 Maximum: 36
project_id	String	Project ID of the bound instance. Minimum: 0 Maximum: 36

Example Requests

Updating a global private bandwidth

```
PUT https://{cc_endpoint}/v3/{domain_id}/gcb/gcbbandwidths/{id}
```

```
{
  "globalconnection_bandwidth" : {
    "name" : "test",
    "description" : "Description",
    "size" : 5
  }
}
```

Example Responses

Status code: 200

The global private bandwidth has been updated.

```
{
  "request_id" : "1b90e4762e3090961a30ca3a712dc0ed",
  "globalconnection_bandwidth" : {
    "id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "name" : "name",
    "description" : "description",
    "domain_id" : "521bb3d98bed4c6c9ee8669bd0620f76",
    "bordercross" : false,
    "type" : "Region",
    "binding_service" : "CC",
    "enterprise_project_id" : "0c478f9e-73a4-4c45-b9bc-b2c3bfc0d4c0",
    "charge_mode" : "bwd",
    "size" : 100,
    "sla_level" : "Au",
    "local_site_code" : "cn-south-guangzhou",
    "remote_site_code" : "cn-north-beijing4",
    "frozen" : "false",
    "spec_code_id" : "",
    "tags" : [ ],
    "created_at" : "2024-01-24T08:26:41.914Z",
    "updated_at" : "2024-01-24T08:26:41.914Z",
    "enable_share" : false,
    "instances" : [ ]
  }
}
```

```
}  
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Updating a global private bandwidth

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.GlobalCredentials;  
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.cc.v3.region.CcRegion;  
import com.huaweicloud.sdk.cc.v3.*;  
import com.huaweicloud.sdk.cc.v3.model.*;  
  
public class UpdateGlobalConnectionBandwidthSolution {  
  
    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");  
  
        ICredential auth = new GlobalCredentials()  
            .withAk(ak)  
            .withSk(sk);  
  
        CcClient client = CcClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))  
            .build();  
        UpdateGlobalConnectionBandwidthRequest request = new  
UpdateGlobalConnectionBandwidthRequest();  
        UpdateGlobalConnectionBandwidthRequestBody body = new  
UpdateGlobalConnectionBandwidthRequestBody();  
        UpdateGlobalConnectionBandwidth globalconnectionBandwidthbody = new  
UpdateGlobalConnectionBandwidth();  
        globalconnectionBandwidthbody.setSize(5)  
            .withName("test")  
            .withDescription("Description");  
        body.withGlobalconnectionBandwidth(globalconnectionBandwidthbody);  
        request.withBody(body);  
        try {  
            UpdateGlobalConnectionBandwidthResponse response =  
client.updateGlobalConnectionBandwidth(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

Updating a global private bandwidth

```
# coding: utf-8  
  
from huaweicloudsdkcore.auth.credentials import GlobalCredentials  
from huaweicloudsdkcc.v3.region.cc_region import CcRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")  
    sk = __import__('os').getenv("CLOUD_SDK_SK")  
  
    credentials = GlobalCredentials(ak, sk) \  
  
    client = CcClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(CcRegion.value_of("<YOUR REGION>")) \  
        .build()  
  
    try:  
        request = UpdateGlobalConnectionBandwidthRequest()  
        globalconnectionbandwidthbody = UpdateGlobalConnectionBandwidth(  
            size=5,  
            name="test",  
            description="Description"  
        )  
        request.body = UpdateGlobalConnectionBandwidthRequestBody(  
            globalconnection_bandwidth=globalconnectionbandwidthbody  
        )  
        response = client.update_global_connection_bandwidth(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

Updating a global private bandwidth

```
package main  
  
import (  
    "fmt"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"  
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

auth := global.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    Build()

client := cc.NewCcClient(
    cc.CcClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.UpdateGlobalConnectionBandwidthRequest{
    sizeGlobalconnectionBandwidth:= int32(5)
    nameGlobalconnectionBandwidth:= "test"
    descriptionGlobalconnectionBandwidth:= "Description"
    globalconnectionBandwidthbody := &model.UpdateGlobalConnectionBandwidth{
        Size: &sizeGlobalconnectionBandwidth,
        Name: &nameGlobalconnectionBandwidth,
        Description: &descriptionGlobalconnectionBandwidth,
    }
}
request.Body = &model.UpdateGlobalConnectionBandwidthRequestBody{
    GlobalconnectionBandwidth: globalconnectionBandwidthbody,
}
response, err := client.UpdateGlobalConnectionBandwidth(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The global private bandwidth has been updated.

Error Codes

See [Error Codes](#).

4.13.5 Deleting a Global Private Bandwidth

Function

This API is used to delete a global private bandwidth.

Calling Method

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

URI

DELETE /v3/{domain_id}/gcb/gcbbandwidths/{id}

Table 4-466 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36

Request Parameters

Table 4-467 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

None

Example Requests

Deleting a global private bandwidth

DELETE https://{cc_endpoint}/v3/{domain_id}/gcb/gcbbandwidths/{id}

Example Responses

None

Status Codes

Status Code	Description
204	The global private bandwidth has been deleted.

Error Codes

See [Error Codes](#).

4.13.6 Binding a Global Private Bandwidth to an Instance

Function

This API is used to bind a global private bandwidth to an instance.

Calling Method

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

URI

POST /v3/{domain_id}/gcb/gcbbandwidths/{id}/associate-instance

Table 4-468 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36

Request Parameters

Table 4-469 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-470 Request body parameters

Parameter	Mandatory	Type	Description
gcbandwidths	Yes	Array of AssociateGlobalConnectionBandwidthInstanceRequestInfo objects	Detailed information about the instance that the global private bandwidth is bound to. Array Length: 1 - 200

Table 4-471 AssociateGlobalConnectionBandwidthInstanceRequestInfo

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Instance ID. The ID can contain 1 to 36 characters, including letters, digits, underscores (_), and hyphens (-). Minimum: 1 Maximum: 36
resource_type	Yes	String	Instance type. Minimum: 1 Maximum: 36
region_id	No	String	Region where the instance is located. If this parameter is left blank, the default value is global . Minimum: 1 Maximum: 36
project_id	Yes	String	Project ID of the region where the instance is located. Minimum: 1 Maximum: 36

Response Parameters

Status code: 200

Table 4-472 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
gcbandwidths	Array of AssociateGlobalConnectionBandwidthInstanceResponseInfo objects	Response to the operation for binding a global private bandwidth to an instance Array Length: 1 - 200

Table 4-473 AssociateGlobalConnectionBandwidthInstanceResponseInfo

Parameter	Type	Description
resource_id	String	Instance ID. The ID can contain 1 to 36 characters, including letters, digits, underscores (_), and hyphens (-). Minimum: 1 Maximum: 36
resource_type	String	Instance type. Minimum: 1 Maximum: 36
region_id	String	Region where the instance is located. If this parameter is left blank, the default value is global . Minimum: 1 Maximum: 36
project_id	String	Project ID of the region where the instance is located. Minimum: 1 Maximum: 36
result	String	Binding operation result. <ul style="list-style-type: none"> • success: The operation is successful. • fail: The operation failed.
message	String	Error information when the binding operation fails. Minimum: 0 Maximum: 4096

Example Requests

Binding a global private bandwidth to an instance

```
POST https://{cc_endpoint}/v3/{domain_id}/gcb/gcbandwidths/{id}/associate-instance

{
  "gcbandwidths" : [ {
    "resource_type" : "GEIP",
    "resource_id" : "37289f8a-8fd2-4eff-a6c4-f3b94bdbb1bc",
    "project_id" : "XXX",
    "region_id" : "global"
  } ]
}
```

Example Responses

Status code: 200

The global private bandwidth has been bound to the instance.

```
{
  "request_id" : "1b90e4762e3090961a30ca3a712dc0ed",
  "gcbandwidths" : [ {
    "resource_id" : "37289f8a-8fd2-4eff-a6c4-f3b94bdbb1bc",
    "resource_type" : "GEIP",
    "project_id" : "XXX",
    "region_id" : "global",
    "result" : "success",
    "message" : ""
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Binding a global private bandwidth to an instance

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class AssociateGlobalConnectionBandwidthInstanceSolution {

    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");
    }
}
```

```
ICredential auth = new GlobalCredentials()
    .withAk(ak)
    .withSk(sk);

CcClient client = CcClient.newBuilder()
    .withCredential(auth)
    .withRegion(CcRegion.valueOf("<YOUR REGION>"))
    .build();
AssociateGlobalConnectionBandwidthInstanceRequest request = new
AssociateGlobalConnectionBandwidthInstanceRequest();
AssociateGlobalConnectionBandwidthInstanceRequestBody body = new
AssociateGlobalConnectionBandwidthInstanceRequestBody();
List<AssociateGlobalConnectionBandwidthInstanceRequestInfo> listbodyGcbandwidths = new
ArrayList<>();
listbodyGcbandwidths.add(
    new AssociateGlobalConnectionBandwidthInstanceRequestInfo()
        .withResourceType("GEIP")
        .withRegionId("global")
        .withResourceId("37289f8a-8fd2-4eff-a6c4-f3b94bdbb1bc")
        .withProjectId("XXX")
    );
body.withGcbandwidths(listbodyGcbandwidths);
request.withBody(body);
try {
    AssociateGlobalConnectionBandwidthInstanceResponse response =
client.associateGlobalConnectionBandwidthInstance(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

Binding a global private bandwidth to an instance

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
```

```
request = AssociateGlobalConnectionBandwidthInstanceRequest()
listGcbandwidthsbody = [
    AssociateGlobalConnectionBandwidthInstanceRequestInfo(
        resource_type="GEIP",
        region_id="global",
        resource_id="37289f8a-8fd2-4eff-a6c4-f3b94bdbb1bc",
        project_id="XXX"
    )
]
request.body = AssociateGlobalConnectionBandwidthInstanceRequestBody(
    gcbandwidths=listGcbandwidthsbody
)
response = client.associate_global_connection_bandwidth_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

Binding a global private bandwidth to an instance

```
package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.AssociateGlobalConnectionBandwidthInstanceRequest{}
    regionIdGcbandwidths:= "global"
    var listGcbandwidthsbody = []model.AssociateGlobalConnectionBandwidthInstanceRequestInfo{
        {
            ResourceType: "GEIP",
            RegionId: &regionIdGcbandwidths,
            ResourceId: "37289f8a-8fd2-4eff-a6c4-f3b94bdbb1bc",
            ProjectId: "XXX",
        },
    }
    request.Body = &model.AssociateGlobalConnectionBandwidthInstanceRequestBody{
        Gcbandwidths: listGcbandwidthsbody,
    }
    response, err := client.AssociateGlobalConnectionBandwidthInstance(request)
    if err == nil {
```

```

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

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The global private bandwidth has been bound to the instance.

Error Codes

See [Error Codes](#).

4.13.7 Unbinding a Global Private Bandwidth from an Instance

Function

This API is used to unbind a global private bandwidth from an instance.

Calling Method

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

URI

POST /v3/{domain_id}/gcb/gcbbandwidths/{id}/disassociate-instance

Table 4-474 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
id	Yes	String	Resource ID. Minimum: 32 Maximum: 36

Request Parameters

Table 4-475 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Table 4-476 Request body parameters

Parameter	Mandatory	Type	Description
gcbandwidths	Yes	Array of DisassociateGlobalConnectionBandwidthInstanceRequestInfo objects	Detailed information about the instance that the global private bandwidth is unbound from. Array Length: 1 - 200

Table 4-477 DisassociateGlobalConnectionBandwidthInstanceRequestInfo

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Instance ID. The ID can contain 1 to 36 characters, including letters, digits, underscores (_), and hyphens (-). Minimum: 1 Maximum: 36
resource_type	Yes	String	Instance type. Minimum: 1 Maximum: 36
region_id	No	String	Region where the instance is located. If this parameter is left blank, the default value is global . Minimum: 1 Maximum: 36

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of the region where the instance is located. Minimum: 1 Maximum: 36

Response Parameters

Status code: 200

Table 4-478 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
gcbandwidths	Array of DisassociateGlobalConnectionBandwidthInstanceResponseInfo objects	Response to the operation for unbinding a global private bandwidth from an instance. Array Length: 1 - 200

Table 4-479 DisassociateGlobalConnectionBandwidthInstanceResponseInfo

Parameter	Type	Description
resource_id	String	Instance ID. The ID can contain 1 to 36 characters, including letters, digits, underscores (_), and hyphens (-). Minimum: 1 Maximum: 36
resource_type	String	Instance type. Minimum: 1 Maximum: 36
region_id	String	Region where the instance is located. If this parameter is left blank, the default value is global . Minimum: 1 Maximum: 36

Parameter	Type	Description
project_id	String	Project ID of the region where the instance is located. Minimum: 1 Maximum: 36
result	String	Unbinding operation result. <ul style="list-style-type: none"> • success: The operation is successful. • fail: The operation failed.
message	String	Error information when the unbinding operation fails. Minimum: 0 Maximum: 4096

Example Requests

Unbinding a global private bandwidth from an instance

POST https://{cc_endpoint}/v3/{domain_id}/gcb/gcbbandwidths/{id}/disassociate-instance

```
{
  "gcbbandwidths": [ {
    "resource_type": "GEIP",
    "resource_id": "37289f8a-8fd2-4eff-a6c4-f3b94bdbb1bc",
    "project_id": "XXX",
    "region_id": "global"
  } ]
}
```

Example Responses

Status code: 200

The global private bandwidth has been unbound from the instance.

```
{
  "request_id": "1b90e4762e3090961a30ca3a712dc0ed",
  "gcbbandwidths": [ {
    "resource_id": "37289f8a-8fd2-4eff-a6c4-f3b94bdbb1bc",
    "resource_type": "GEIP",
    "project_id": "XXX",
    "region_id": "global",
    "result": "success",
    "message": ""
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Unbinding a global private bandwidth from an instance


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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class DisassociateGlobalConnectionBandwidthInstanceSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        DisassociateGlobalConnectionBandwidthInstanceRequest request = new
        DisassociateGlobalConnectionBandwidthInstanceRequest();
        DisassociateGlobalConnectionBandwidthInstanceRequestBody body = new
        DisassociateGlobalConnectionBandwidthInstanceRequestBody();
        List<DisassociateGlobalConnectionBandwidthInstanceRequestInfo> listbodyGcbandwidths = new
        ArrayList<>();
        listbodyGcbandwidths.add(
            new DisassociateGlobalConnectionBandwidthInstanceRequestInfo()
                .withResourceType("GEIP")
                .withRegionId("global")
                .withResourceId("37289f8a-8fd2-4eff-a6c4-f3b94bdbb1bc")
                .withProjectId("XXX")
        );
        body.withGcbandwidths(listbodyGcbandwidths);
        request.withBody(body);
        try {
            DisassociateGlobalConnectionBandwidthInstanceResponse response =
            client.disassociateGlobalConnectionBandwidthInstance(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

Unbinding a global private bandwidth from an instance

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdccc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdccc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = DisassociateGlobalConnectionBandwidthInstanceRequest()
        listGcbandwidthsbody = [
            DisassociateGlobalConnectionBandwidthInstanceRequestInfo(
                resource_type="GEIP",
                region_id="global",
                resource_id="37289f8a-8fd2-4eff-a6c4-f3b94bdbb1bc",
                project_id="XXX"
            )
        ]
        request.body = DisassociateGlobalConnectionBandwidthInstanceRequestBody(
            gcbandwidths=listGcbandwidthsbody
        )
        response = client.disassociate_global_connection_bandwidth_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

Unbinding a global private bandwidth from an instance

```
package main

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

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
```

```

WithSk(sk).
Build()

client := cc.NewCcClient(
    cc.CcClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.DisassociateGlobalConnectionBandwidthInstanceRequest{}
regionIdGcbandwidths:= "global"
var listGcbandwidthsbody = []model.DisassociateGlobalConnectionBandwidthInstanceRequestInfo{
    {
        ResourceType: "GEIP",
        RegionId: &regionIdGcbandwidths,
        ResourceId: "37289f8a-8fd2-4eff-a6c4-f3b94bdbb1bc",
        ProjectId: "XXX",
    },
}
request.Body = &model.DisassociateGlobalConnectionBandwidthInstanceRequestBody{
    Gcbandwidths: listGcbandwidthsbody,
}
response, err := client.DisassociateGlobalConnectionBandwidthInstance(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The global private bandwidth has been unbound from the instance.

Error Codes

See [Error Codes](#).

4.13.8 Querying the List of Global Private Bandwidths That Meet the Binding Conditions

Function

This API is used to query the list of global private bandwidths that meet the binding conditions. Parameters **marker** and **limit** are used for pagination query. The two parameters take effect only when they are used together.

Calling Method

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

URI

GET /v3/{domain_id}/gcb/gcbbandwidths/support-bindings

Table 4-480 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Table 4-481 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 1000 Minimum: 1 Maximum: 1000 Default: 1000
marker	No	String	Pagination query information. You can obtain the marker values from the response of the last API call. You can enter the marker value of the previous page or the next page. If you enter the marker value of the previous page, the previous page will be queried. If you enter the marker value of the next page, the next page will be queried. During pagination query, the query criteria, including the filters, sorting criteria, and the limit value, cannot be modified. Minimum: 1 Maximum: 4096
enterprise_project_id	No	Array	Enterprise project IDs. Array Length: 1 - 20

Parameter	Mandatory	Type	Description
local_area	No	String	<p>Local access point.</p> <ul style="list-style-type: none"> If the bandwidth type is set to region, all multi-city bandwidths that meet the filtering criteria are returned. This field is not matched for filtering. For other types, this field is used to match local_area of the backbone bandwidth. <p>Additional filtering criteria: The optimal backbone bandwidth type is selected based on local_area and remote_area for filtering.</p> <p>Restrictions: local_area and remote_area can or cannot be left blank at the same time, and their site types must be the same.</p> <p>Minimum: 1 Maximum: 64</p>
remote_area	No	String	<p>Remote access point.</p> <ul style="list-style-type: none"> If the bandwidth type is set to region, all multi-city bandwidths that meet the filtering criteria are returned. This field is not matched for filtering. For other types, this field is used to match remote_area of the backbone bandwidth. <p>Additional filtering criteria: The optimal backbone bandwidth type is selected based on local_area and remote_area for filtering.</p> <p>Restrictions: local_area and remote_area can or cannot be left blank at the same time, and their site types must be the same.</p> <p>Minimum: 1 Maximum: 64</p>

Parameter	Mandatory	Type	Description
binding_service	No	String	Instance type used for listing global private bandwidths. <ul style="list-style-type: none">● Cloud Connect: cloud connection● GEIP: Global EIP● GCN: central network● GSN: site network

Request Parameters

Table 4-482 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: **200**

Table 4-483 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
page_info	PageInfo object	Pagination query information.
globalconnection_bandwidths	Array of GlobalConnectionBandwidth objects	Response body for querying the global private bandwidth list. Array Length: 1 - 2000

Table 4-484 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier. Minimum: 1 Maximum: 4096
previous_mar ker	String	Forward pagination identifier. Minimum: 1 Maximum: 4096
current_count	Integer	Number of the resources in the current list. Minimum: 0 Maximum: 2000

Table 4-485 GlobalConnectionBandwidth

Parameter	Type	Description
id	String	Resource ID.
name	String	Resource name.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
domain_id	String	ID of the account that the instance belongs to.
bordercross	Boolean	Whether the global private bandwidth is used for cross-border communications (between the Chinese mainland and a country/region outside the Chinese mainland). <ul style="list-style-type: none"> ● True: cross-border communications ● False: non-cross-border communications
type	String	Type of a global private bandwidth. <ul style="list-style-type: none"> ● TrsArea: cross-geographic-region bandwidth ● Area: geographic-region bandwidth ● SubArea: region bandwidth ● Region: multi-city bandwidth

Parameter	Type	Description
binding_service	String	Instance type. <ul style="list-style-type: none"> ● Cloud Connect: cloud connection ● GEIP: Global EIP ● GCN: central network ● GSN: site network ● ALL: all instance types
enterprise_project_id	String	ID of the enterprise project that the virtual gateway belongs to. Minimum: 1 Maximum: 36
charge_mode	String	Billing option. By default, billing by bandwidth is enabled. Standard 95th percentile bandwidth billing is controlled using a whitelist. <ul style="list-style-type: none"> ● bwd: billing by bandwidth ● 95: standard 95th percentile bandwidth billing
size	Integer	Range of a global private bandwidth, in Mbit/s. Bandwidth range: 2 Mbit/s to 300 Mbit/s Minimum: 2 Maximum: 300
sla_level	String	Class of a global private bandwidth. There are three classes: platinum, gold, and silver. The default class is gold. Other options are controlled by whitelists. <ul style="list-style-type: none"> ● Pt: platinum ● Au: gold ● Ag: silver Default: Au Minimum: 1 Maximum: 36
local_area	String	Name of a local access point. The x-language parameter in the header is used to control the language. The default language is English. zh-cn indicates Chinese. Minimum: 1 Maximum: 36

Parameter	Type	Description
remote_area	String	Name of a remote access point. The x-language parameter in the header is used to control the language. The default language is English. zh-cn indicates Chinese. Minimum: 1 Maximum: 36
local_site_code	String	Code of the local access point. Minimum: 1 Maximum: 36
remote_site_code	String	Code of s remote access point. Minimum: 1 Maximum: 36
admin_state	String	Global private bandwidth status. <ul style="list-style-type: none"> ● NORMAL: The bandwidth is normal. ● FREZZED: The bandwidth is frozen.
frozen	Boolean	Whether a global private bandwidth is frozen. <ul style="list-style-type: none"> ● true: The bandwidth is frozen. ● false: The bandwidth is not frozen.
spec_code_id	String	UUID of a line specification code. Minimum: 1 Maximum: 36
tags	Array of Tag objects	Resource tags. Array Length: 1 - 20
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
enable_share	Boolean	Whether a global private bandwidth can be used by multiple instances. <ul style="list-style-type: none"> ● true: The bandwidth can be used by multiple instances. ● false: The bandwidth cannot be used by multiple instances.

Parameter	Type	Description
instances	Array of GlobalConnectionBandwidthAssociatedInstance objects	The list of instances that the global private bandwidth is bound to. Array Length: 0 - 200

Table 4-486 Tag

Parameter	Type	Description
key	String	Tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	Tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Table 4-487 GlobalConnectionBandwidthAssociatedInstance

Parameter	Type	Description
id	String	Bound instance ID. Minimum: 0 Maximum: 36
type	String	Bound instance type. Minimum: 0 Maximum: 36
region_id	String	Region of the bound instance. The default value is global for global services. Minimum: 0 Maximum: 36
project_id	String	Project ID of the bound instance. Minimum: 0 Maximum: 36

Example Requests

Querying the list of global private bandwidths that meet the binding conditions

```
GET https://{cc_endpoint}/v3/{domain_id}/gcb/gcbandwidths/support-bindings?
binding_service=CC&local_area=cn-south-guangzhou&remote_area=cn-north-beijing4
```

Example Responses

Status code: 200

The global private bandwidth list has been queried.

```
{
  "request_id" : "61126320a1802d5c6444f9d2d76526c2",
  "globalconnection_bandwidths" : [ {
    "id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "name" : "name",
    "description" : "description",
    "domain_id" : "521bb3d98bed4c6c9ee8669bd0620f76",
    "bordercross" : false,
    "type" : "Region",
    "binding_service" : "CC",
    "enterprise_project_id" : "0c478f9e-73a4-4c45-b9bc-b2c3bfc0d4c0",
    "charge_mode" : "bwd",
    "size" : 100,
    "sla_level" : "Au",
    "local_site_code" : "cn-south-guangzhou",
    "remote_site_code" : "cn-north-beijing4",
    "frozen" : false,
    "spec_code_id" : "",
    "tags" : [ ],
    "created_at" : "2024-01-24T08:26:41.914Z",
    "updated_at" : "2024-01-24T08:26:41.914Z",
    "enable_share" : false,
    "instances" : [ ]
  } ],
  "page_info" : {
    "next_marker" : "XXX",
    "previous_marker" : "XXX",
    "current_count" : 1
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListSupportBindingConnectionBandwidthsSolution {

    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");

ICredential auth = new GlobalCredentials()
    .withAk(ak)
    .withSk(sk);

CcClient client = CcClient.newBuilder()
    .withCredential(auth)
    .withRegion(CcRegion.valueOf("<YOUR REGION>"))
    .build();
ListSupportBindingConnectionBandwidthsRequest request = new
ListSupportBindingConnectionBandwidthsRequest();
request.withLocalArea("<local_area>");
request.withRemoteArea("<remote_area>");

request.withBindingService(ListSupportBindingConnectionBandwidthsRequest.BindingServiceEnum.fromValu
e("<binding_service>"));
request.withLimit(<limit>);
request.withMarker("<marker>");
request.withEnterpriseProjectId();
try {
    ListSupportBindingConnectionBandwidthsResponse response =
client.listSupportBindingConnectionBandwidths(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ListSupportBindingConnectionBandwidthsRequest()
        request.local_area = "<local_area>"
        request.remote_area = "<remote_area>"
```

```
request.binding_service = "<binding_service>"
request.limit = <limit>
request.marker = "<marker>"
request.enterprise_project_id =
response = client.list_support_binding_connection_bandwidths(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListSupportBindingConnectionBandwidthsRequest{}
    localAreaRequest:= "<local_area>"
    request.LocalArea = &localAreaRequest
    remoteAreaRequest:= "<remote_area>"
    request.RemoteArea = &remoteAreaRequest
    request.BindingService =
model.GetListSupportBindingConnectionBandwidthsRequestBindingServiceEnum().<BINDING_SERVICE>
    limitRequest:= int32(<limit>)
    request.Limit = &limitRequest
    markerRequest:= "<marker>"
    request.Marker = &markerRequest
    response, err := client.ListSupportBindingConnectionBandwidths(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The global private bandwidth list has been queried.

Error Codes

See [Error Codes](#).

4.13.9 Querying a Global Private Bandwidth

Function

This API is used to query the details of a global private bandwidth.

Calling Method

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

URI

GET /v3/{domain_id}/gcb/configs

Table 4-488 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Request Parameters

Table 4-489 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 200

Table 4-490 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
configs	ListGlobalConnectionBandwidthConfigs object	Dynamic configuration items for purchasing a global private bandwidth.

Table 4-491 ListGlobalConnectionBandwidthConfigs

Parameter	Type	Description
size_range	Array of GlobalConnectionBandwidthSizeRange objects	Bandwidth range of global private bandwidths by billing option. Array Length: 0 - 10
charge_mode	Array of strings	List of supported billing options. Array Length: 0 - 10
services	Array of strings	Instance type. Array Length: 0 - 10
gcb_type	Array of strings	Bandwidth type. Array Length: 0 - 10
ratio_95peak_plus	Integer	Percentage of the minimum bandwidth in enhanced 95th percentile bandwidth billing. Minimum: 0 Maximum: 100
ratio_95peak_guar	Integer	Percentage of the minimum bandwidth in standard 95th percentile bandwidth billing. Minimum: 0 Maximum: 100
crossborder	Boolean	Whether a cross-border permit is approved.
quotas	Array of GlobalConnectionBandwidthQuotas objects	Quota information. Array Length: 1 - 10

Parameter	Type	Description
sla_level	Array of strings	Line grade. Array Length: 1 - 10
bind_limit	Integer	Maximum number of instances that are allowed to use a shared bandwidth. Minimum: 0 Maximum: 2000
enable_area_bandwidth	Boolean	Whether to enable the geographic region bandwidth.
enable_change_95	Boolean	Whether standard 95th percentile bandwidth billing can be changed to billing by bandwidth.
enable_spec_code	Boolean	Whether multiple line specifications are supported.

Table 4-492 GlobalConnectionBandwidthSizeRange

Parameter	Type	Description
type	String	Billing option of a global private bandwidth. Value options: bwd : billing by bandwidth 95 : standard 95th percentile bandwidth billing Minimum: 0 Maximum: 64
min	Integer	Minimum global private bandwidth, in Mbit/s. Minimum: 1 Maximum: 2147483647
max	Integer	Maximum global private bandwidth, in Mbit/s. Minimum: 1 Maximum: 2147483647

Table 4-493 GlobalConnectionBandwidthQuotas

Parameter	Type	Description
quota	Integer	Quotas. Minimum: 0 Maximum: 2147483647

Parameter	Type	Description
used	Integer	Used quotas. Minimum: 0 Maximum: 2147483647
type	String	Quota type. <ul style="list-style-type: none"> • gcb.size: global private bandwidth range • gcb.count: number of global private bandwidths

Example Requests

Querying the details of a global private bandwidth

```
GET https://{cc_endpoint}/v3/{domain_id}/gcb/configs
```

Example Responses

Status code: 200

The global private bandwidth details have been queried.

```
{
  "request_id": "61126320a1802d5c6444f9d2d76526c2",
  "configs": {
    "size_range": [ {
      "min": 2,
      "max": 300,
      "type": "bwd"
    } ],
    "charge_mode": [ "bwd", 95 ],
    "services": [ "GEIP", "CC", "GCN", "GSN" ],
    "gcb_type": [ "Region", "SubArea", "Area", "TrsArea" ],
    "ratio_95peak_guar": 0,
    "crossborder": false,
    "quotas": [ {
      "quota": 99999999,
      "used": 3451,
      "type": "gcb.size"
    }, {
      "quota": 10000,
      "used": 16,
      "type": "gcb.count"
    } ],
    "bind_limit": 200,
    "sla_level": [ "Pt", "Au", "Ag" ]
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

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

```
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

public class ListGlobalConnectionBandwidthConfigsSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ListGlobalConnectionBandwidthConfigsRequest request = new
        ListGlobalConnectionBandwidthConfigsRequest();
        try {
            ListGlobalConnectionBandwidthConfigsResponse response =
            client.listGlobalConnectionBandwidthConfigs(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

    client = CcClient.new_builder() \
```

```
.with_credentials(credentials) \  
.with_region(CcRegion.value_of("<YOUR REGION>")) \  
.build()  
  
try:  
    request = ListGlobalConnectionBandwidthConfigsRequest()  
    response = client.list_global_connection_bandwidth_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/global"  
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")  
  
    auth := global.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        Build()  
  
    client := cc.NewCcClient(  
        cc.CcClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).  
            Build())  
  
    request := &model.ListGlobalConnectionBandwidthConfigsRequest{}  
    response, err := client.ListGlobalConnectionBandwidthConfigs(request)  
    if err == nil {  
        fmt.Printf("%+v\n", response)  
    } else {  
        fmt.Println(err)  
    }  
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The global private bandwidth details have been queried.

Error Codes

See [Error Codes](#).

4.13.10 Querying the Line Specification List

Function

This API is used to query the line specification list. Fields in the response body of this API are controlled using a whitelist. They are left blank by default.

Parameters **marker** and **limit** are used for pagination query. The two parameters take effect only when they are used together.

Calling Method

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

URI

GET /v3/{domain_id}/gcb/spec-codes

Table 4-494 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Table 4-495 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 1000 Minimum: 1 Maximum: 1000 Default: 1000

Parameter	Mandatory	Type	Description
marker	No	String	<p>Pagination query information. You can obtain the marker values from the response of the last API call. You can enter the marker value of the previous page or the next page. If you enter the marker value of the previous page, the previous page will be queried. If you enter the marker value of the next page, the next page will be queried. During pagination query, the query criteria, including the filters, sorting criteria, and the limit value, cannot be modified.</p> <p>Minimum: 1 Maximum: 4096</p>
id	No	Array	<p>Resource ID. Multiple IDs can be queried.</p> <p>Array Length: 1 - 20</p>
local_area	No	String	<p>Local access point code included in the line specification.</p> <p>Minimum: 1 Maximum: 64</p>
remote_area	No	String	<p>Remote access point code included in the line specification.</p> <p>Minimum: 1 Maximum: 64</p>
level	No	Array	<p>Bandwidth class.</p> <ul style="list-style-type: none"> ● Pt: Platinum ● Au: Gold ● Ag: Silver <p>Array Length: 1 - 10</p>

Request Parameters

Table 4-496 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: **200**

Table 4-497 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
page_info	PageInfo object	Pagination query information.
spec_codes	Array of GlobalConnectionBandwidthSpecCode objects	Response body for querying the line specification list. Array Length: 1 - 10

Table 4-498 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier. Minimum: 1 Maximum: 4096
previous_marker	String	Forward pagination identifier. Minimum: 1 Maximum: 4096
current_count	Integer	Number of the resources in the current list. Minimum: 0 Maximum: 2000

Table 4-499 GlobalConnectionBandwidthSpecCode

Parameter	Type	Description
id	String	Resource ID.
local_area	String	Local access point. This parameter is used together with remote_area to describe the applicability of a global private bandwidth. The value can contain 1 to 64 characters, including digits, letters, underscores (_), hyphens (-), and periods (.). The site code is obtained through API calls. If the bandwidth type is Region , this parameter is optional. For other types, this parameter is mandatory. Minimum: 1 Maximum: 36
remote_area	String	Remote access point. This parameter is used together with local_area to describe the applicability of a global private bandwidth. The value can contain 1 to 64 characters, including digits, letters, underscores (_), hyphens (-), and periods (.). The site code is obtained through API calls. If the bandwidth type is Region , this parameter is optional. For other types, this parameter is mandatory. Minimum: 1 Maximum: 36
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
name_zh	String	Line specification in Chinese. Minimum: 0 Maximum: 64
name_en	String	Line specification in English. Minimum: 0 Maximum: 64
level	String	Line grade. <ul style="list-style-type: none"> ● Pt: platinum ● Au: gold ● Ag: silver Minimum: 0 Maximum: 64

Parameter	Type	Description
sku	String	Product code of specific global private bandwidth line specifications. Minimum: 0 Maximum: 64
size	Integer	Minimum bandwidth for sale, in Mbit/s. Minimum: 2 Maximum: 999999

Example Requests

Querying the line specification list

```
GET https://{cc_endpoint}/v3/{domain_id}/gcb/spec-codes
```

Example Responses

Status code: 200

The line specification list has been queried.

```
{
  "request_id": "61126320a1802d5c6444f9d2d76526c2",
  "spec_codes": [ {
    "id": "5c2d5343-cde2-4a41-83ae-56b7f44d73b5",
    "name_zh": "DirectionalBandwidth",
    "name_en": "DirectionalBandwidth",
    "local_area": "cn-southwest-guiyang1",
    "remote_area": "cn-north-wulanchabu1",
    "level": "Ag",
    "sku": "guiyang1_wulanchabu1_ext_ag",
    "size": 2,
    "created_at": "2024-01-24T08:26:41.914Z",
    "updated_at": "2024-01-24T08:26:41.914Z"
  } ],
  "page_info": {
    "next_marker": "XXX",
    "previous_marker": "XXX",
    "current_count": 1
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
```



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

import java.util.List;
import java.util.ArrayList;

public class ListGlobalConnectionBandwidthSpecCodesSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ListGlobalConnectionBandwidthSpecCodesRequest request = new
ListGlobalConnectionBandwidthSpecCodesRequest();
        request.withLocalArea("<local_area>");
        request.withRemoteArea("<remote_area>");
        request.withLevel();
        request.withLimit(<limit>);
        request.withMarker("<marker>");
        request.withId();
        try {
            ListGlobalConnectionBandwidthSpecCodesResponse response =
client.listGlobalConnectionBandwidthSpecCodes(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \
```

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

try:
    request = ListGlobalConnectionBandwidthSpecCodesRequest()
    request.local_area = "<local_area>"
    request.remote_area = "<remote_area>"
    request.level =
    request.limit = <limit>
    request.marker = "<marker>"
    request.id =
    response = client.list_global_connection_bandwidth_spec_codes(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListGlobalConnectionBandwidthSpecCodesRequest{}
    localAreaRequest := "<local_area>"
    request.LocalArea = &localAreaRequest
    remoteAreaRequest := "<remote_area>"
    request.RemoteArea = &remoteAreaRequest
    limitRequest := int32(<limit>)
    request.Limit = &limitRequest
    markerRequest := "<marker>"
    request.Marker = &markerRequest
    response, err := client.ListGlobalConnectionBandwidthSpecCodes(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

```
}  
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The line specification list has been queried.

Error Codes

See [Error Codes](#).

4.13.11 Querying the Site List

Function

This API is used to query the site list.

Parameters **marker** and **limit** are used for pagination query. The two parameters take effect only when they are used together.

Calling Method

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

URI

GET /v3/{domain_id}/gcb/sites

Table 4-500 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Table 4-501 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 1000 Minimum: 1 Maximum: 1000 Default: 1000
marker	No	String	Pagination query information. You can obtain the marker values from the response of the last API call. You can enter the marker value of the previous page or the next page. If you enter the marker value of the previous page, the previous page will be queried. If you enter the marker value of the next page, the next page will be queried. During pagination query, the query criteria, including the filters, sorting criteria, and the limit value, cannot be modified. Minimum: 1 Maximum: 4096
id	No	Array	Resource ID. Multiple IDs can be queried. Array Length: 1 - 20
name_en	No	String	User-defined site information in English. Minimum: 1 Maximum: 64
name_cn	No	String	User-defined site information in Chinese. Minimum: 1 Maximum: 64
site_code	No	String	Site code. Minimum: 1 Maximum: 64

Parameter	Mandatory	Type	Description
site_type	No	String	Site type. <ul style="list-style-type: none">• Area: a geographic region site• SubArea: a region site• Region: a multi-city site

Request Parameters

Table 4-502 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: 200

Table 4-503 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
page_info	PageInfo object	Pagination query information.
site_infos	Array of GlobalConnectionBandwidthSites objects	Response body for querying the site list. Array Length: 1 - 10

Table 4-504 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier. Minimum: 1 Maximum: 4096
previous_mar ker	String	Forward pagination identifier. Minimum: 1 Maximum: 4096
current_count	Integer	Number of the resources in the current list. Minimum: 0 Maximum: 2000

Table 4-505 GlobalConnectionBandwidthSites

Parameter	Type	Description
id	String	Resource ID.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
name_en	String	User-defined site name in English. Value range: 1 to 255 characters Minimum: 1 Maximum: 255
name_cn	String	User-defined site name in English. Value range: 1 to 64 characters Minimum: 1 Maximum: 64
site_code	String	Site code in the format of <area_code>[-<subarea_code>[-<region_code>]]. Value range: 1 to 64 characters Minimum: 1 Maximum: 64

Parameter	Type	Description
site_type	String	Site type that corresponds to the site code. One code indicates a site in a geographic region, two codes indicate a site in a region, and three codes indicate a multi-city site. <ul style="list-style-type: none"> • Area: a geographic region site • SubArea: a region site • Region: a multi-city site Minimum: 1 Maximum: 64
service_list	String	List of services supported at the site. Multiple services are separated by commas (,). Value range: 0 to 255 characters Minimum: 0 Maximum: 255
group_list	Array of SiteGroupReferenceInfo objects	Data model for association between site groups and external systems. Array Length: 1 - 10
region_id	String	ID of a standard Huawei Cloud region. This parameter is mandatory only when the site is inherited from a Huawei Cloud region. Value range: 0 to 64 characters Minimum: 0 Maximum: 64
public_border_group	String	Whether the site is a central site or an edge site. center indicates a central site. Value range: 0 to 255 characters Minimum: 0 Maximum: 255

Table 4-506 SiteGroupReferenceInfo

Parameter	Type	Description
id	String	Resource ID.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255

Parameter	Type	Description
name_en	String	User-defined site group name in English. Value range: 1 to 255 characters Minimum: 1 Maximum: 255
name_cn	String	User-defined site group name in Chinese. Value range: 1 to 64 characters Minimum: 1 Maximum: 64

Example Requests

Querying the site list

```
GET https://{cc_endpoint}/v3/{domain_id}/gcb/sites
```

Example Responses

Status code: 200

The site list has been queried.

```
{
  "request_id": "61126320a1802d5c6444f9d2d76526c2",
  "site_infos": [ {
    "id": "5c2d5343-cde2-4a41-83ae-56b7f44d73b5",
    "description": "description",
    "name_cn": "CN north beijing4",
    "name_en": "CN north beijing4",
    "site_code": "cn-north-beijing4",
    "site_type": "Region",
    "service_list": "CC,GEIP",
    "region_id": "cn-north-4",
    "public_border_group": "center",
    "group_list": [ {
      "id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
      "description": "description"
    } ],
    "created_at": "2024-01-24T08:26:41.914Z",
    "updated_at": "2024-01-24T08:26:41.914Z"
  } ],
  "page_info": {
    "next_marker": "XXX",
    "previous_marker": "XXX",
    "current_count": 1
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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



```
import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListGlobalConnectionBandwidthSitesSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

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

        ListGlobalConnectionBandwidthSitesRequest request = new
        ListGlobalConnectionBandwidthSitesRequest();
        request.withSiteCode("<site_code>");

        request.withSiteType(ListGlobalConnectionBandwidthSitesRequest.SiteTypeEnum.fromValue("<site_type>"));
        request.withLimit("<limit>");
        request.withMarker("<marker>");
        request.withId();
        try {
            ListGlobalConnectionBandwidthSitesResponse response =
            client.listGlobalConnectionBandwidthSites(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdccc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdccc.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 = __import__('os').getenv("CLOUD_SDK_AK")
sk = __import__('os').getenv("CLOUD_SDK_SK")

credentials = GlobalCredentials(ak, sk) \

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

try:
    request = ListGlobalConnectionBandwidthSitesRequest()
    request.site_code = "<site_code>"
    request.site_type = "<site_type>"
    request.limit = <limit>
    request.marker = "<marker>"
    request.id =
    response = client.list_global_connection_bandwidth_sites(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListGlobalConnectionBandwidthSitesRequest{}
    siteCodeRequest := "<site_code>"
    request.SiteCode = &siteCodeRequest
    siteTypeRequest := model.GetListGlobalConnectionBandwidthSitesRequestSiteTypeEnum().<SITE_TYPE>
    request.SiteType = &siteTypeRequest
    limitRequest := int32(<limit>)
    request.Limit = &limitRequest
    markerRequest := "<marker>"
    request.Marker = &markerRequest
```

```

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

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The site list has been queried.

Error Codes

See [Error Codes](#).

4.13.12 Querying the Line Grade List

Function

This API is used to query the line grade list.

Parameters **marker** and **limit** are used for pagination query. The two parameters take effect only when they are used together.

Calling Method

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

URI

GET /v3/{domain_id}/gcb/line-levels

Table 4-507 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32

Table 4-508 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 1000 Minimum: 1 Maximum: 1000 Default: 1000
marker	No	String	Pagination query information. You can obtain the marker values from the response of the last API call. You can enter the marker value of the previous page or the next page. If you enter the marker value of the previous page, the previous page will be queried. If you enter the marker value of the next page, the next page will be queried. During pagination query, the query criteria, including the filters, sorting criteria, and the limit value, cannot be modified. Minimum: 1 Maximum: 4096
id	No	Array	Resource ID. Multiple IDs can be queried. Array Length: 1 - 20
local_area	No	String	Local access point code included in the line specification. Minimum: 1 Maximum: 64
remote_area	No	String	Remote access point code included in the line specification. Minimum: 1 Maximum: 64

Parameter	Mandatory	Type	Description
levels	No	Array	Bandwidth class. <ul style="list-style-type: none"> • Pt: Platinum • Ag: Silver Array Length: 1 - 10

Request Parameters

Table 4-509 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 2000000

Response Parameters

Status code: **200**

Table 4-510 Response body parameters

Parameter	Type	Description
request_id	String	Resource ID. Minimum: 32 Maximum: 36
page_info	PageInfo object	Pagination query information.
line_levels	Array of GlobalConnectionBandwidthLineLevel objects	Response body for querying the line grade list. Array Length: 1 - 2000

Table 4-511 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier. Minimum: 1 Maximum: 4096

Parameter	Type	Description
previous_marker	String	Forward pagination identifier. Minimum: 1 Maximum: 4096
current_count	Integer	Number of the resources in the current list. Minimum: 0 Maximum: 2000

Table 4-512 GlobalConnectionBandwidthLineLevel

Parameter	Type	Description
id	String	Resource ID.
description	String	Resource description. Angle brackets (<>) are not allowed. Minimum: 0 Maximum: 255
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Time when the resource was updated. The time must be in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
local_area	String	Local access point. Minimum: 1 Maximum: 64
remote_area	String	Remote access point. Minimum: 1 Maximum: 64
levels	Array of strings	Line grade. There are three options: platinum, gold, and silver. Minimum: 1 Maximum: 36 Array Length: 1 - 10

Example Requests

Querying the line grade list

```
GET https://{cc_endpoint}/v3/{domain_id}/gcb/line-levels
```

Example Responses

Status code: 200

The line grade list has been queried.

```
{
  "request_id" : "61126320a1802d5c6444f9d2d76526c2",
  "line_levels" : [ {
    "id" : "5c2d5343-cde2-4a41-83ae-56b7f44d73b5",
    "description" : "description",
    "local_area" : "cn-north-beijing4",
    "remote_area" : "cn-south-guangzhou",
    "levels" : [ "Pt", "Ag" ],
    "created_at" : "2024-01-24T08:26:41.914Z",
    "updated_at" : "2024-01-24T08:26:41.914Z"
  } ],
  "page_info" : {
    "next_marker" : "XXX",
    "previous_marker" : "XXX",
    "current_count" : 1
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListGlobalConnectionBandwidthLineLevelsSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

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

        ListGlobalConnectionBandwidthLineLevelsRequest request = new
        ListGlobalConnectionBandwidthLineLevelsRequest();
        request.withLocalArea("<local_area>");
        request.withRemoteArea("<remote_area>");
    }
}
```

```
request.withLevels();
request.withLimit(<limit>);
request.withMarker("<marker>");
request.withId();
try {
    ListGlobalConnectionBandwidthLineLevelsResponse response =
client.listGlobalConnectionBandwidthLineLevels(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ListGlobalConnectionBandwidthLineLevelsRequest()
        request.local_area = "<local_area>"
        request.remote_area = "<remote_area>"
        request.levels =
        request.limit = <limit>
        request.marker = "<marker>"
        request.id =
        response = client.list_global_connection_bandwidth_line_levels(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/global"
cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3"
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v3/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListGlobalConnectionBandwidthLineLevelsRequest{}
    localAreaRequest:= "<local_area>"
    request.LocalArea = &localAreaRequest
    remoteAreaRequest:= "<remote_area>"
    request.RemoteArea = &remoteAreaRequest
    limitRequest:= int32(<limit>)
    request.Limit = &limitRequest
    markerRequest:= "<marker>"
    request.Marker = &markerRequest
    response, err := client.ListGlobalConnectionBandwidthLineLevels(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The line grade list has been queried.

Error Codes

See [Error Codes](#).

4.14 Global Private Bandwidth Tag Management

4.14.1 Querying a Global Private Bandwidth Tag in an Account

Function

This API is used to query a global private bandwidth tag in an account.

Calling Method

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

URI

GET /v3/gcb/{resource_id}/tags

Table 4-513 Path Parameters

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Unique identifier of a resource. Minimum: 0 Maximum: 64

Request Parameters

Table 4-514 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. Minimum: 0 Maximum: 102400

Response Parameters

Status code: 200

Table 4-515 Response body parameters

Parameter	Type	Description
tags	Array of Tag objects	Tag list. Array Length: 0 - 20

Parameter	Type	Description
request_id	String	Request ID. Minimum: 0 Maximum: 36

Table 4-516 Tag

Parameter	Type	Description
key	String	Tag key. Minimum: 1 Maximum: 128
value	String	Tag value. Minimum: 0 Maximum: 255

Example Requests

Querying a global private bandwidth tag in an account

```
GET https://{cc_endpoint}/v3/gcb/{resource_id}/tags
```

Example Responses

Status code: 200

The global private bandwidth tag has been queried.

```
{
  "tags": [ {
    "key": "DEV",
    "value": "DEV1"
  } ],
  "request_id": "d6bf8eeb1f2b6e503e88f3dc3024c7e7"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v2.region.CcRegion;
import com.huaweicloud.sdk.cc.v2.*;
```

```
import com.huaweicloud.sdk.cc.v2.model.*;

public class ListGcbResourceTagsSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ListGcbResourceTagsRequest request = new ListGcbResourceTagsRequest();
        try {
            ListGcbResourceTagsResponse response = client.listGcbResourceTags(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v2.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.v2 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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ListGcbResourceTagsRequest()
        response = client.list_gcb_resource_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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The global private bandwidth tag has been queried.

Error Codes

See [Error Codes](#).

4.14.2 Adding a Tag to a Global Private Bandwidth

Function

This API is used to add a tag to a global private bandwidth.

Calling Method

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

URI

POST /v3/gcb/{resource_id}/tags

Table 4-517 Path Parameters

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Unique identifier of a resource. Minimum: 0 Maximum: 64

Request Parameters

Table 4-518 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. Minimum: 0 Maximum: 102400

Table 4-519 Request body parameters

Parameter	Mandatory	Type	Description
tag	Yes	RequiredTag object	Key-value pair.

Table 4-520 RequiredTag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. Minimum: 1 Maximum: 128
value	Yes	String	Tag value. Minimum: 0 Maximum: 255

Response Parameters

None

Example Requests

Adding a tag to a global private bandwidth

```
POST https://{cc_endpoint}/v3/gcb/{resource_id}/tags
```

```
{
  "tag" : {
    "key" : "DEV",
    "value" : "DEV1"
  }
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Adding a tag to a global private bandwidth

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v2.region.CcRegion;
import com.huaweicloud.sdk.cc.v2.*;
import com.huaweicloud.sdk.cc.v2.model.*;

public class CreateGcbResourceTagSolution {

    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");

ICredential auth = new GlobalCredentials()
    .withAk(ak)
    .withSk(sk);

CcClient client = CcClient.newBuilder()
    .withCredential(auth)
    .withRegion(CcRegion.valueOf("<YOUR REGION>"))
    .build();
CreateGcbResourceTagRequest request = new CreateGcbResourceTagRequest();
CreateGcbTagRequestBody body = new CreateGcbTagRequestBody();
RequiredTag tagbody = new RequiredTag();
tagbody.withKey("DEV")
    .withValue("DEV1");
body.withTag(tagbody);
request.withBody(body);
try {
    CreateGcbResourceTagResponse response = client.createGcbResourceTag(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

Adding a tag to a global private bandwidth

```
# coding: utf-8
```

```
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v2.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.v2 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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")
```

```
    credentials = GlobalCredentials(ak, sk) \
```

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

```
    try:
        request = CreateGcbResourceTagRequest()
        tagbody = RequiredTag()
```



```
        key="DEV",
        value="DEV1"
    )
    request.body = CreateGcbTagRequestBody(
        tag=tagbody
    )
    response = client.create_gcb_resource_tag(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

Adding a tag to a global private bandwidth

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateGcbResourceTagRequest{}
    tagbody := &model.RequiredTag{
        Key: "DEV",
        Value: "DEV1",
    }
    request.Body = &model.CreateGcbTagRequestBody{
        Tag: tagbody,
    }
    response, err := client.CreateGcbResourceTag(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the [Sample Code](#) tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	The operation is successful.

Error Codes

See [Error Codes](#).

4.14.3 Deleting a Global Private Bandwidth Tag

Function

This API is used to delete a tag from a global private bandwidth.

Calling Method

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

URI

DELETE /v3/gcb/{resource_id}/tags/{tag_key}

Table 4-521 Path Parameters

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Unique identifier of a resource. Minimum: 0 Maximum: 64
tag_key	Yes	String	Key of the tag to be deleted. Minimum: 0 Maximum: 128

Request Parameters

Table 4-522 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. Minimum: 0 Maximum: 102400

Response Parameters

None

Example Requests

Deleting a global private bandwidth tag

```
DELETE https://{cc_endpoint}/v3/gcb/{resource_id}/tags/{tag_key}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v2.region.CcRegion;
import com.huaweicloud.sdk.cc.v2.*;
import com.huaweicloud.sdk.cc.v2.model.*;

public class DeleteGcbResourceTagSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteGcbResourceTagRequest request = new DeleteGcbResourceTagRequest();
        try {
            DeleteGcbResourceTagResponse response = client.deleteGcbResourceTag(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  
  
from huaweicloudsdkcore.auth.credentials import GlobalCredentials  
from huaweicloudsdkcc.v2.region.cc_region import CcRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsdkcc.v2 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 = __import__('os').getenv("CLOUD_SDK_AK")  
    sk = __import__('os').getenv("CLOUD_SDK_SK")  
  
    credentials = GlobalCredentials(ak, sk) \  
  
    client = CcClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(CcRegion.value_of("<YOUR REGION>")) \  
        .build()  
  
    try:  
        request = DeleteGcbResourceTagRequest()  
        response = client.delete_gcb_resource_tag(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/global"  
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/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")  
  
    auth := global.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        Build()  
  
    client := cc.NewCcClient(  
        cc.CcClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).
```

```

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

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	The operation is successful.

Error Codes

See [Error Codes](#).

4.14.4 Adding Tags to a Global Private Bandwidth

Function

This API is used to add tags to a global private bandwidth.

Calling Method

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

URI

POST /v3/gcb/{resource_id}/tags/create

Table 4-523 Path Parameters

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Unique identifier of a resource. Minimum: 0 Maximum: 64

Request Parameters

Table 4-524 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. Minimum: 0 Maximum: 102400

Table 4-525 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of RequiredTag objects	Resource tags to be added or deleted. Array Length: 0 - 20

Table 4-526 RequiredTag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. Minimum: 1 Maximum: 128
value	Yes	String	Tag value. Minimum: 0 Maximum: 255

Response Parameters

None

Example Requests

Adding tags to a global private bandwidth

POST https://{cc_endpoint}/v3/gcb/{resource_id}/tags/create

```
{
  "tags" : [ {
    "key" : "key1",
    "value" : "value1"
  }, {
    "key" : "key2",
    "value" : "value2"
  } ]
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Adding tags to a global private bandwidth

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v2.region.CcRegion;
import com.huaweicloud.sdk.cc.v2.*;
import com.huaweicloud.sdk.cc.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class BatchCreateGcbResourceTagsSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        BatchCreateGcbResourceTagsRequest request = new BatchCreateGcbResourceTagsRequest();
        CreateDeleteGcbTagsRequestBody body = new CreateDeleteGcbTagsRequestBody();
        List<RequiredTag> listbodyTags = new ArrayList<>();
        listbodyTags.add(
            new RequiredTag()
                .withKey("key1")
                .withValue("value1")
        );
        listbodyTags.add(
            new RequiredTag()
                .withKey("key2")
                .withValue("value2")
        );
        body.withTags(listbodyTags);
        request.withBody(body);
        try {
            BatchCreateGcbResourceTagsResponse response = client.batchCreateGcbResourceTags(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

Adding tags to a global private bandwidth

```
# coding: utf-8  
  
from huaweicloudsdkcore.auth.credentials import GlobalCredentials  
from huaweicloudsdkcc.v2.region.cc_region import CcRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsdkcc.v2 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 = __import__('os').getenv("CLOUD_SDK_AK")  
    sk = __import__('os').getenv("CLOUD_SDK_SK")  
  
    credentials = GlobalCredentials(ak, sk) \  
  
    client = CcClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(CcRegion.value_of("<YOUR REGION>")) \  
        .build()  
  
    try:  
        request = BatchCreateGcbResourceTagsRequest()  
        listTagsbody = [  
            RequiredTag(  
                key="key1",  
                value="value1"  
            ),  
            RequiredTag(  
                key="key2",  
                value="value2"  
            )  
        ]  
        request.body = CreateDeleteGcbTagsRequestBody(  
            tags=listTagsbody  
        )  
        response = client.batch_create_gcb_resource_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

Adding tags to a global private bandwidth

```
package main  
  
import (  
    "fmt")
```



```

"github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2"
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.BatchCreateGcbResourceTagsRequest{}
    var listTagsbody = []model.RequiredTag{
        {
            Key: "key1",
            Value: "value1",
        },
        {
            Key: "key2",
            Value: "value2",
        },
    }
    request.Body = &model.CreateDeleteGcbTagsRequestBody{
        Tags: listTagsbody,
    }
    response, err := client.BatchCreateGcbResourceTags(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	Tags have been added to the global private bandwidth.

Error Codes

See [Error Codes](#).

4.14.5 Deleting Global Private Bandwidth Tags

Function

This API is used to delete tags from a global private bandwidth.

Calling Method

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

URI

POST /v3/gcb/{resource_id}/tags/delete

Table 4-527 Path Parameters

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Unique identifier of a resource. Minimum: 0 Maximum: 64

Request Parameters

Table 4-528 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. Minimum: 0 Maximum: 102400

Table 4-529 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of RequiredTag objects	Resource tags to be added or deleted. Array Length: 0 - 20

Table 4-530 RequiredTag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. Minimum: 1 Maximum: 128
value	Yes	String	Tag value. Minimum: 0 Maximum: 255

Response Parameters

None

Example Requests

Deleting tags from a global private bandwidth

```
DELETE https://{cc_endpoint}/v3/gcb/{resource_id}/tags/delete
```

```
{
  "tags" : [ {
    "key" : "key1",
    "value" : "value1"
  }, {
    "key" : "key2",
    "value" : "value2"
  } ]
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Deleting tags from a global private bandwidth

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v2.region.CcRegion;
import com.huaweicloud.sdk.cc.v2.*;
import com.huaweicloud.sdk.cc.v2.model.*;

import java.util.List;
import java.util.ArrayList;
```

```
public class BatchDeleteGcbResourceTagsSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        BatchDeleteGcbResourceTagsRequest request = new BatchDeleteGcbResourceTagsRequest();
        CreateDeleteGcbTagsRequestBody body = new CreateDeleteGcbTagsRequestBody();
        List<RequiredTag> listbodyTags = new ArrayList<>();
        listbodyTags.add(
            new RequiredTag()
                .withKey("key1")
                .withValue("value1")
        );
        listbodyTags.add(
            new RequiredTag()
                .withKey("key2")
                .withValue("value2")
        );
        body.withTags(listbodyTags);
        request.withBody(body);
        try {
            BatchDeleteGcbResourceTagsResponse response = client.batchDeleteGcbResourceTags(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

Deleting tags from a global private bandwidth

```
# coding: utf-8
```

```
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdccc.v2.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdccc.v2 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 = __import__('os').getenv("CLOUD_SDK_AK")
sk = __import__('os').getenv("CLOUD_SDK_SK")

credentials = GlobalCredentials(ak, sk) \

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

try:
    request = BatchDeleteGcbResourceTagsRequest()
    listTagsbody = [
        RequiredTag(
            key="key1",
            value="value1"
        ),
        RequiredTag(
            key="key2",
            value="value2"
        )
    ]
    request.body = CreateDeleteGcbTagsRequestBody(
        tags=listTagsbody
    )
    response = client.batch_delete_gcb_resource_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

Deleting tags from a global private bandwidth

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.BatchDeleteGcbResourceTagsRequest{}
    var listTagsbody = []model.RequiredTag{
```

```

    {
      Key: "key1",
      Value: "value1",
    },
    {
      Key: "key2",
      Value: "value2",
    },
  ],
}
request.Body = &model.CreateDeleteGcbTagsRequestBody{
  Tags: listTagsbody,
}
response, err := client.BatchDeleteGcbResourceTags(request)
if err == nil {
  fmt.Printf("%v\n", response)
} else {
  fmt.Println(err)
}
}

```

More

For SDK sample code of more programming languages, see the [Sample Code](#) tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	Tags have been deleted from the global private bandwidth.

Error Codes

See [Error Codes](#).

4.14.6 Querying the Number of Global Private Bandwidth Tags in an Account

Function

This API is used to query the number of global private bandwidth tags in an account.

Calling Method

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

URI

POST /v3/gcb/resource-instances/count

Request Parameters

Table 4-531 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. Minimum: 0 Maximum: 102400

Table 4-532 Request body parameters

Parameter	Mandatory	Type	Description
request_id	No	String	Request ID. Minimum: 0 Maximum: 36
without_any_tag	No	Boolean	If this parameter is set to true , all resources without tags are queried. In this case, the tags , tags_any , not_tags , and not_tags_any fields are not required.
tags	No	Array of QueryTag objects	The instances to be queried contain tags listed in tags . Each instance to be queried contains a maximum of 20 keys. Each tag key has a maximum of 10 tag values. The tag value corresponding to each tag key can be an empty array but the structure cannot be missing. Each tag key must be unique, and each tag value for a tag key must be unique. The response returns instances containing all tags in this list. Keys in this list are in the AND relationship and values in each key-value structure are in the OR relationship. If no tag filtering condition is specified, full data is returned. Array Length: 0 - 50

Parameter	Mandatory	Type	Description
tags_any	No	Array of QueryTag objects	<p>The instances to be queried contain any tag listed in tags_any. Each instance to be queried contains a maximum of 20 keys. Each tag key has a maximum of 10 tag values. The tag value corresponding to each tag key can be an empty array but the structure cannot be missing. Each tag key must be unique, and each tag value for a tag key must be unique. The response returns instances containing any tag in this list. Keys in this list are in the OR relationship and values in each key-value structure are also in the OR relationship. If no tag filtering criteria is specified, full data is returned.</p> <p>Array Length: 0 - 50</p>
not_tags	No	Array of QueryTag objects	<p>The instances to be queried do not contain any tag listed in not_tags. Each instance to be queried contains a maximum of 20 keys. Each tag key has a maximum of 10 tag values. The tag value corresponding to each tag key can be an empty array but the structure cannot be missing. Each tag key must be unique, and each tag value for a tag key must be unique. The response returns resources containing no tags in this list. Keys in this list are in the AND relationship and values in each key-value structure are in the OR relationship. If no tag filtering criteria is specified, full data is returned.</p> <p>Array Length: 0 - 50</p>

Parameter	Mandatory	Type	Description
not_tags_any	No	Array of QueryTag objects	The instances to be queried do not contain all tags listed in not_tags_any . Each instance to be queried contains a maximum of 20 keys. Each tag key has a maximum of 10 tag values. The tag value corresponding to each tag key can be an empty array but the structure cannot be missing. Each tag key must be unique, and each tag value for a tag key must be unique. The response returns resources containing no tag in this list. Keys in this list are in the OR relationship and values in each key-value structure are also in the OR relationship. If no tag filtering criteria is specified, full data is returned. Array Length: 0 - 50
matches	No	Array of TmsMatch objects	Whether to match the tags: The tag key is set to resource_name . If there is a tag value, fuzzy matching is used. If the tag value is an empty string, exact matching is used. Array Length: 0 - 50

Table 4-533 QueryTag

Parameter	Mandatory	Type	Description
key	Yes	String	Key. Minimum: 0 Maximum: 128
values	Yes	Array of strings	Tag value list. Minimum: 0 Maximum: 255 Array Length: 1 - 10

Table 4-534 TmsMatch

Parameter	Mandatory	Type	Description
key	Yes	String	Key. Currently, only resource_name is supported. Other key values will be available later. Minimum: 1 Maximum: 128
value	Yes	String	Tag value. Minimum: 0 Maximum: 255

Response Parameters

Status code: 200

Table 4-535 Response body parameters

Parameter	Type	Description
total_count	Integer	Total number of records. Minimum: 0 Maximum: 2000.0
request_id	String	Request ID. Minimum: 0 Maximum: 36

Example Requests

Querying the number of global private bandwidth tags in an account

POST https://{cc_endpoint}/v3/gcb/resource-instances/count

```
{
  "not_tags" : [ {
    "key" : "key1",
    "values" : [ "value1", "value2" ]
  } ],
  "tags" : [ {
    "key" : "key1",
    "values" : [ "value1", "value2" ]
  } ],
  "tags_any" : [ {
    "key" : "key1",
    "values" : [ "value1", "value2" ]
  } ],
  "not_tags_any" : [ {
    "key" : "key1",
    "values" : [ "value1", "value2" ]
  } ]
}
```

```
    }],  
    "matches" : [ {  
      "key" : "resource_name",  
      "value" : "resource1"  
    } ]  
  }  
}
```

Example Responses

Status code: 200

The number of global private bandwidth tags in an account has been queried.

```
{  
  "request_id" : "e3371202-7e85-4c16-bb4b-4e3c092734f7",  
  "total_count" : 1  
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Querying the number of global private bandwidth tags in an account

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.GlobalCredentials;  
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.cc.v2.region.CcRegion;  
import com.huaweicloud.sdk.cc.v2.*;  
import com.huaweicloud.sdk.cc.v2.model.*;  
  
import java.util.List;  
import java.util.ArrayList;  
  
public class CountGcbResourceByTagSolution {  
  
    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");  
  
        ICredential auth = new GlobalCredentials()  
            .withAk(ak)  
            .withSk(sk);  
  
        CcClient client = CcClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))  
            .build();  
        CountGcbResourceByTagRequest request = new CountGcbResourceByTagRequest();  
        QueryResourceByTagRequestBody body = new QueryResourceByTagRequestBody();  
        List<TmsMatch> listbodyMatches = new ArrayList<>();  
        listbodyMatches.add(  
            new TmsMatch()  
                .withKey("resource_name")  
                .withValue("resource1")  
        );  
    }  
}
```

```
);
List<String> listNotTagsAnyValues = new ArrayList<>();
listNotTagsAnyValues.add("value1");
listNotTagsAnyValues.add("value2");
List<QueryTag> listbodyNotTagsAny = new ArrayList<>();
listbodyNotTagsAny.add(
    new QueryTag()
        .withKey("key1")
        .withValues(listNotTagsAnyValues)
);
List<String> listNotTagsValues = new ArrayList<>();
listNotTagsValues.add("value1");
listNotTagsValues.add("value2");
List<QueryTag> listbodyNotTags = new ArrayList<>();
listbodyNotTags.add(
    new QueryTag()
        .withKey("key1")
        .withValues(listNotTagsValues)
);
List<String> listTagsAnyValues = new ArrayList<>();
listTagsAnyValues.add("value1");
listTagsAnyValues.add("value2");
List<QueryTag> listbodyTagsAny = new ArrayList<>();
listbodyTagsAny.add(
    new QueryTag()
        .withKey("key1")
        .withValues(listTagsAnyValues)
);
List<String> listTagsValues = new ArrayList<>();
listTagsValues.add("value1");
listTagsValues.add("value2");
List<QueryTag> listbodyTags = new ArrayList<>();
listbodyTags.add(
    new QueryTag()
        .withKey("key1")
        .withValues(listTagsValues)
);
body.withMatches(listbodyMatches);
body.withNotTagsAny(listbodyNotTagsAny);
body.withNotTags(listbodyNotTags);
body.withTagsAny(listbodyTagsAny);
body.withTags(listbodyTags);
request.withBody(body);
try {
    CountGcbResourceByTagResponse response = client.countGcbResourceByTag(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

Querying the number of global private bandwidth tags in an account

```
# coding: utf-8
```

```
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdccc.v2.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
```

```
from huaweicloudsdkcc.v2 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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = CountGcbResourceByTagRequest()
        listMatchesbody = [
            TmsMatch(
                key="resource_name",
                value="resource1"
            )
        ]
        listValuesNotTagsAny = [
            "value1",
            "value2"
        ]
        listNotTagsAnybody = [
            QueryTag(
                key="key1",
                values=listValuesNotTagsAny
            )
        ]
        listValuesNotTags = [
            "value1",
            "value2"
        ]
        listNotTagsbody = [
            QueryTag(
                key="key1",
                values=listValuesNotTags
            )
        ]
        listValuesTagsAny = [
            "value1",
            "value2"
        ]
        listTagsAnybody = [
            QueryTag(
                key="key1",
                values=listValuesTagsAny
            )
        ]
        listValuesTags = [
            "value1",
            "value2"
        ]
        listTagsbody = [
            QueryTag(
                key="key1",
                values=listValuesTags
            )
        ]
        request.body = QueryResourceByTagRequestBody(
            matches=listMatchesbody,
            not_tags_any=listNotTagsAnybody,
```

```
        not_tags=listNotTagsbody,  
        tags_any=listTagsAnybody,  
        tags=listTagsbody  
    )  
    response = client.count_gcb_resource_by_tag(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

Querying the number of global private bandwidth tags in an account

```
package main  
  
import (  
    "fmt"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"  
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/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")  
  
    auth := global.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        Build()  
  
    client := cc.NewCcClient(  
        cc.CcClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).  
            Build())  
  
    request := &model.CountGcbResourceByTagRequest{  
        var listMatchesbody = []model.TmsMatch{  
            {  
                Key: "resource_name",  
                Value: "resource1",  
            },  
        }  
        var listValuesNotTagsAny = []string{  
            "value1",  
            "value2",  
        }  
        var listNotTagsAnybody = []model.QueryTag{  
            {  
                Key: "key1",  
                Values: listValuesNotTagsAny,  
            },  
        }  
        var listValuesNotTags = []string{  
            "value1",  
            "value2",  
        }  
        var listNotTagsbody = []model.QueryTag{  
            {
```

```

        Key: "key1",
        Values: listValuesNotTags,
    },
}
var listValuesTagsAny = []string{
    "value1",
    "value2",
}
var listTagsAnybody = []model.QueryTag{
    {
        Key: "key1",
        Values: listValuesTagsAny,
    },
}
var listValuesTags = []string{
    "value1",
    "value2",
}
var listTagsbody = []model.QueryTag{
    {
        Key: "key1",
        Values: listValuesTags,
    },
}
}
request.Body = &model.QueryResourceByTagRequestBody{
    Matches: &listMatchesbody,
    NotTagsAny: &listNotTagsAnybody,
    NotTags: &listNotTagsbody,
    TagsAny: &listTagsAnybody,
    Tags: &listTagsbody,
}
response, err := client.CountGcbResourceByTag(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The number of global private bandwidth tags in an account has been queried.

Error Codes

See [Error Codes](#).

4.14.7 Querying the Global Private Bandwidth List in an Account

Function

This API is used to query the global private bandwidth list in an account.

Calling Method

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

URI

POST /v3/gcb/resource-instances/filter

Table 4-536 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Records to be queried. Minimum: 1 Maximum: 1000.0
offset	No	Integer	Index position. Minimum: 0 Maximum: 999

Request Parameters

Table 4-537 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. Minimum: 0 Maximum: 102400

Table 4-538 Request body parameters

Parameter	Mandatory	Type	Description
request_id	No	String	Request ID. Minimum: 0 Maximum: 36

Parameter	Mandatory	Type	Description
without_any_tag	No	Boolean	If this parameter is set to true , all resources without tags are queried. In this case, the tags , tags_any , not_tags , and not_tags_any fields are not required.
tags	No	Array of QueryTag objects	The instances to be queried contain tags listed in tags . Each instance to be queried contains a maximum of 20 keys. Each tag key has a maximum of 10 tag values. The tag value corresponding to each tag key can be an empty array but the structure cannot be missing. Each tag key must be unique, and each tag value for a tag key must be unique. The response returns instances containing all tags in this list. Keys in this list are in the AND relationship and values in each key-value structure are in the OR relationship. If no tag filtering condition is specified, full data is returned. Array Length: 0 - 50

Parameter	Mandatory	Type	Description
tags_any	No	Array of QueryTag objects	<p>The instances to be queried contain any tag listed in tags_any. Each instance to be queried contains a maximum of 20 keys. Each tag key has a maximum of 10 tag values. The tag value corresponding to each tag key can be an empty array but the structure cannot be missing. Each tag key must be unique, and each tag value for a tag key must be unique. The response returns instances containing any tag in this list. Keys in this list are in the OR relationship and values in each key-value structure are also in the OR relationship. If no tag filtering criteria is specified, full data is returned.</p> <p>Array Length: 0 - 50</p>
not_tags	No	Array of QueryTag objects	<p>The instances to be queried do not contain any tag listed in not_tags. Each instance to be queried contains a maximum of 20 keys. Each tag key has a maximum of 10 tag values. The tag value corresponding to each tag key can be an empty array but the structure cannot be missing. Each tag key must be unique, and each tag value for a tag key must be unique. The response returns resources containing no tags in this list. Keys in this list are in the AND relationship and values in each key-value structure are in the OR relationship. If no tag filtering criteria is specified, full data is returned.</p> <p>Array Length: 0 - 50</p>

Parameter	Mandatory	Type	Description
not_tags_any	No	Array of QueryTag objects	The instances to be queried do not contain all tags listed in not_tags_any . Each instance to be queried contains a maximum of 20 keys. Each tag key has a maximum of 10 tag values. The tag value corresponding to each tag key can be an empty array but the structure cannot be missing. Each tag key must be unique, and each tag value for a tag key must be unique. The response returns resources containing no tag in this list. Keys in this list are in the OR relationship and values in each key-value structure are also in the OR relationship. If no tag filtering criteria is specified, full data is returned. Array Length: 0 - 50
matches	No	Array of TmsMatch objects	Whether to match the tags: The tag key is set to resource_name . If there is a tag value, fuzzy matching is used. If the tag value is an empty string, exact matching is used. Array Length: 0 - 50

Table 4-539 QueryTag

Parameter	Mandatory	Type	Description
key	Yes	String	Key. Minimum: 0 Maximum: 128
values	Yes	Array of strings	Tag value list. Minimum: 0 Maximum: 255 Array Length: 1 - 10

Table 4-540 TmsMatch

Parameter	Mandatory	Type	Description
key	Yes	String	Key. Currently, only resource_name is supported. Other key values will be available later. Minimum: 1 Maximum: 128
value	Yes	String	Tag value. Minimum: 0 Maximum: 255

Response Parameters

Status code: 200

Table 4-541 Response body parameters

Parameter	Type	Description
resources	Array of TmsResource objects	Array Length: 0 - 2000
total_count	Integer	Total number of records. Minimum: 0 Maximum: 2000.0
request_id	String	Request ID Minimum: 0 Maximum: 36

Table 4-542 TmsResource

Parameter	Type	Description
resource_id	String	Resource ID. Minimum: 1 Maximum: 36
tags	Array of Tag objects	Tag list. If no tag is matched, an empty array is returned. Array Length: 0 - 20

Parameter	Type	Description
resource_name	String	Resource name. This parameter is an empty string by default if there is no resource name. Minimum: 1 Maximum: 64

Table 4-543 Tag

Parameter	Type	Description
key	String	Tag key. Minimum: 1 Maximum: 128
value	String	Tag value. Minimum: 0 Maximum: 255

Example Requests

Querying the global private bandwidth list in an account

POST https://{cc_endpoint}/v3/gcb/resource-instances/filter

```
{
  "matches": [ {
    "key": "resource_name",
    "value": "resource1"
  } ],
  "not_tags": [ {
    "key": "key1",
    "values": [ "value1", "value2" ]
  } ],
  "tags": [ {
    "key": "key1",
    "values": [ "value1", "value2" ]
  } ],
  "tags_any": [ {
    "key": "key1",
    "values": [ "value1", "value2" ]
  } ],
  "not_tags_any": [ {
    "key": "key1",
    "values": [ "value1", "value2" ]
  } ]
}
```

Example Responses

Status code: 200

The global private bandwidth list in an account has been queried.

```
{
  "resources": [ {
```

```
"resource_id" : "cb9d7ead-834a-4275-93e1-217f79df9dc1",
"resource_name" : "test",
"tags" : [ {
  "key" : "key1",
  "value" : "value1"
} ]
} ],
"request_id" : "e3371202-7e85-4c16-bb4b-4e3c092734f7",
"total_count" : 1
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Querying the global private bandwidth list in an account

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v2.region.CcRegion;
import com.huaweicloud.sdk.cc.v2.*;
import com.huaweicloud.sdk.cc.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListGcbResourceByTagSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ListGcbResourceByTagRequest request = new ListGcbResourceByTagRequest();
        request.withLimit(<limit>);
        request.withOffset(<offset>);
        QueryResourceByTagRequestBody body = new QueryResourceByTagRequestBody();
        List<TmsMatch> listbodyMatches = new ArrayList<>();
        listbodyMatches.add(
            new TmsMatch()
                .withKey("resource_name")
                .withValue("resource1")
        );
        List<String> listNotTagsAnyValues = new ArrayList<>();
        listNotTagsAnyValues.add("value1");
        listNotTagsAnyValues.add("value2");
        List<QueryTag> listbodyNotTagsAny = new ArrayList<>();
        listbodyNotTagsAny.add(
```

```
        new QueryTag()
            .withKey("key1")
            .withValues(listNotTagsAnyValues)
    );
    List<String> listNotTagsValues = new ArrayList<>();
    listNotTagsValues.add("value1");
    listNotTagsValues.add("value2");
    List<QueryTag> listbodyNotTags = new ArrayList<>();
    listbodyNotTags.add(
        new QueryTag()
            .withKey("key1")
            .withValues(listNotTagsValues)
    );
    List<String> listTagsAnyValues = new ArrayList<>();
    listTagsAnyValues.add("value1");
    listTagsAnyValues.add("value2");
    List<QueryTag> listbodyTagsAny = new ArrayList<>();
    listbodyTagsAny.add(
        new QueryTag()
            .withKey("key1")
            .withValues(listTagsAnyValues)
    );
    List<String> listTagsValues = new ArrayList<>();
    listTagsValues.add("value1");
    listTagsValues.add("value2");
    List<QueryTag> listbodyTags = new ArrayList<>();
    listbodyTags.add(
        new QueryTag()
            .withKey("key1")
            .withValues(listTagsValues)
    );
    body.withMatches(listbodyMatches);
    body.withNotTagsAny(listbodyNotTagsAny);
    body.withNotTags(listbodyNotTags);
    body.withTagsAny(listbodyTagsAny);
    body.withTags(listbodyTags);
    request.withBody(body);
    try {
        ListGcbResourceByTagResponse response = client.listGcbResourceByTag(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

Querying the global private bandwidth list in an account

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v2.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.v2 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 = __import__('os').getenv("CLOUD_SDK_AK")
sk = __import__('os').getenv("CLOUD_SDK_SK")

credentials = GlobalCredentials(ak, sk) \

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

try:
    request = ListGcbResourceByTagRequest()
    request.limit = <limit>
    request.offset = <offset>
    listMatchesbody = [
        TmsMatch(
            key="resource_name",
            value="resource1"
        )
    ]
    listValuesNotTagsAny = [
        "value1",
        "value2"
    ]
    listNotTagsAnybody = [
        QueryTag(
            key="key1",
            values=listValuesNotTagsAny
        )
    ]
    listValuesNotTags = [
        "value1",
        "value2"
    ]
    listNotTagsbody = [
        QueryTag(
            key="key1",
            values=listValuesNotTags
        )
    ]
    listValuesTagsAny = [
        "value1",
        "value2"
    ]
    listTagsAnybody = [
        QueryTag(
            key="key1",
            values=listValuesTagsAny
        )
    ]
    listValuesTags = [
        "value1",
        "value2"
    ]
    listTagsbody = [
        QueryTag(
            key="key1",
            values=listValuesTags
        )
    ]
    request.body = QueryResourceByTagRequestBody(
        matches=listMatchesbody,
        not_tags_any=listNotTagsAnybody,
        not_tags=listNotTagsbody,
        tags_any=listTagsAnybody,
        tags=listTagsbody
    )
)
```



```
response = client.list_gcb_resource_by_tag(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

Querying the global private bandwidth list in an account

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListGcbResourceByTagRequest{}
    limitRequest:= int32(<limit>)
    request.Limit = &limitRequest
    offsetRequest:= int32(<offset>)
    request.Offset = &offsetRequest
    var listMatchesbody = []model.TmsMatch{
        {
            Key: "resource_name",
            Value: "resource1",
        },
    }
    var listValuesNotTagsAny = []string{
        "value1",
        "value2",
    }
    var listNotTagsAnybody = []model.QueryTag{
        {
            Key: "key1",
            Values: listValuesNotTagsAny,
        },
    }
    var listValuesNotTags = []string{
        "value1",
        "value2",
    }
    var listNotTagsbody = []model.QueryTag{
        {
```

```

        Key: "key1",
        Values: listValuesNotTags,
    },
}
var listValuesTagsAny = []string{
    "value1",
    "value2",
}
var listTagsAnybody = []model.QueryTag{
    {
        Key: "key1",
        Values: listValuesTagsAny,
    },
}
var listValuesTags = []string{
    "value1",
    "value2",
}
var listTagsbody = []model.QueryTag{
    {
        Key: "key1",
        Values: listValuesTags,
    },
}
request.Body = &model.QueryResourceByTagRequestBody{
    Matches: &listMatchesbody,
    NotTagsAny: &listNotTagsAnybody,
    NotTags: &listNotTagsbody,
    TagsAny: &listTagsAnybody,
    Tags: &listTagsbody,
}
response, err := client.ListGcbResourceByTag(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The global private bandwidth list in an account has been queried.

Error Codes

See [Error Codes](#).

4.14.8 Querying All Global Private Bandwidth Tags in an Account

Function

This API is used to query all global private bandwidth tags in an account.

Calling Method

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

URI

GET /v3/gcb/tags

Request Parameters

Table 4-544 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. Minimum: 0 Maximum: 102400

Response Parameters

Status code: 200

Table 4-545 Response body parameters

Parameter	Type	Description
tags	Array of TmsTagValues objects	Tag list. Array Length: 0 - 20
total_count	Integer	Total number of records. Minimum: 0 Maximum: 2000.0
request_id	String	Request ID. Minimum: 0 Maximum: 36

Table 4-546 TmsTagValues

Parameter	Type	Description
key	String	Key. Minimum: 0 Maximum: 128
values	Array of strings	Tag value list. Minimum: 0 Maximum: 255 Array Length: 1 - 10

Example Requests

Querying all global private bandwidth tags in an account

```
GET https://{cc_endpoint}/v3/gcb/tags
```

Example Responses

Status code: 200

All global private bandwidth tags in an account have been queried.

```
{
  "tags": [ {
    "key": "key1",
    "values": [ "value1", "value2" ]
  } ],
  "request_id": "e3371202-7e85-4c16-bb4b-4e3c092734f7",
  "total_count": 1
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v2.region.CcRegion;
import com.huaweicloud.sdk.cc.v2.*;
import com.huaweicloud.sdk.cc.v2.model.*;

public class ListGcbTenantTagsSolution {

    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");

ICredential auth = new GlobalCredentials()
    .withAk(ak)
    .withSk(sk);

CcClient client = CcClient.newBuilder()
    .withCredential(auth)
    .withRegion(CcRegion.valueOf("<YOUR REGION>"))
    .build();
ListGcbTenantTagsRequest request = new ListGcbTenantTagsRequest();
try {
    ListGcbTenantTagsResponse response = client.listGcbTenantTags(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v2.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.v2 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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ListGcbTenantTagsRequest()
        response = client.list_gcb_tenant_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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	All global private bandwidth tags in an account have been queried.

Error Codes

See [Error Codes](#).

5 Appendix

5.1 Status Codes

- Normal

Table 5-1 Status codes for successful requests

Status Code	Returned Value	Description
200	OK	Normal response for the POST, GET, and PUT operations
201	Created	Normal response code for POST operations
204	No Content	Normal response code for DELETE operations

- Abnormal

Table 5-2 Status codes for failed requests

Status Code	Returned Value	Description
400	Bad Request	The server failed to process the request.
401	Unauthorized	You must enter a username and password to access the requested page.
403	Forbidden	You are forbidden to access the requested page.
404	Not Found	The server could not find the requested page.
405	Method Not Allowed	You are not allowed to use the method specified in the request.

Status Code	Returned Value	Description
406	Not Acceptable	The response generated by the server could not be accepted by the client.
407	Proxy Authentication Required	You must use the proxy server for authentication so that the request can be processed.
408	Request Timeout	The request timed out.
409	Conflict	The request could not be processed due to a conflict.
500	Internal Server Error	Failed to complete the request because of an internal service error.
501	Not Implemented	Failed to complete the request because the server does not support the requested function.
502	Bad Gateway	Failed to complete the request because the server has received an invalid response.
503	Service Unavailable	Failed to complete the request because the service is unavailable.
504	Gateway Timeout	A gateway timeout error occurred.

5.2 Error Codes

If an error code starting with **APIGW** is returned after you call an API, rectify the fault by referring to the instructions provided in [API Gateway Error Codes](#).

Status Code	Error Code	Error Message	Description	Handling Measure
400	CC.1001	The parameter is invalid.	Invalid parameter.	Enter a valid parameter.
400	CC.1006	Tenants are restricted and cannot operate APIs such as adding or modifying resources.	Your account is restricted.	Contact customer service.

Status Code	Error Code	Error Message	Description	Handling Measure
400	CC.1007	Internal Server Error.	An exception occurred when you are calling the API.	Contact customer service.
400	CC.1031	The cloud connection name already in use.	This cloud connection name already exists.	Change the name.
400	CC.1032	The cloud connection cannot be deleted because it has network instances.	This cloud connection has instances and cannot be deleted.	Remove the network instances from the cloud connection and then delete the cloud connection.
400	CC.1033	The cloud connection quota is insufficient.	Insufficient resource quotas.	Contact customer service.
400	CC.1041	Internal Server Error.	Unknown internal error.	Contact customer service.
400	CC.1042	The cloud connection instance is frozen.	The cloud connection is frozen.	Contact customer service.
400	CC.1043	ER type cloud connection is not supported.	Cloud connections cannot be used by enterprise routers.	Contact customer service.
400	CC.1050	Please wait for approval.	The cross-border permit is rejected or has not been approved.	Check the status of the cross-border permit.
400	CC.1051	No application for cross-border.	No application for the cross-border permit has been submitted.	Submit an application.

Status Code	Error Code	Error Message	Description	Handling Measure
400	CC.1052	The bandwidth package used in regionBandwidth cannot be deleted.	The bandwidth package is in use.	Delete the inter-region bandwidths and then delete the bandwidth package.
400	CC.1053	The bandwidth package name is already in use.	The bandwidth package name already exists.	Change the name.
400	CC.1054	The bandwidth package is frozen.	The bandwidth package is frozen.	Contact customer service.
400	CC.1055	The bandwidth package has been bound.	The bandwidth package has been bound to a cloud connection.	Check the bandwidth package.
400	CC.1056	Used RegionBandwidth is bigger than new BwpSize.	The bandwidth size cannot be smaller than the used bandwidth.	Check the used bandwidth in the bandwidth package.
400	CC.1057	The account does not have the permission to operation.	The IP address is not whitelisted.	Contact customer service.
400	CC.1061	Failed to delete the bandwidth package persistence.	Incorrect value returned for deleting the bandwidth package.	Contact customer service.

Status Code	Error Code	Error Message	Description	Handling Measure
400	CC.1062	Failed to update the bandwidth package persistence.	Incorrect value returned for updating the bandwidth package.	Contact customer service.
400	CC.1070	Same-direction instance is existed in cloud connection.	Bandwidth has been assigned for communications between regions.	Check the bandwidth assigned for the network instances in the regions.
400	CC.1071	Region Bandwidth Size is greater than bandwidth package size.	The inter-region bandwidth is greater than the bandwidth of the bandwidth package.	Decrease the inter-domain bandwidth or increase the bandwidth in the bandwidth package.
400	CC.1072	ER type cloud connection does not support 95-billed bandwidth packages.	95th percentile bandwidth packages for cloud connections used by enterprise routers.	Bind a bandwidth package of another type.
400	CC.1081	Internal Server Error.	Unknown internal error.	Contact customer service.
400	CC.1090	The instance has been used.	The network instance has been loaded to a cloud connection.	Load other network instances.

Status Code	Error Code	Error Message	Description	Handling Measure
400	CC.1091	The CIDR of a network instance under the same cloud connection is unique.	The CIDR block of network instances loaded to the same cloud connection must be unique.	Use different CIDR blocks.
400	CC.1092	The instance is not authorized.	The other user has not authorized this network instance for your use.	Check the network instance.
400	CC.1093	The network instance routing conflict.	The route has been used by other resources, such as a VPC peering connection or a VPN.	Check for route conflicts.
400	CC.1094	The ER instance status is not available.	The enterprise router status is abnormal.	Check the enterprise router status.
400	CC.1095	The ER attachment status not available.	The same attachment is created when the enterprise router is loaded.	Contact customer service.
400	CC.1096	The ER attachment quota is insufficient.	Insufficient attachment quota for loading the enterprise router to the cloud connection.	Contact customer service.

Status Code	Error Code	Error Message	Description	Handling Measure
400	CC.1110	Cross account authorization does not support cloud connection instances of this account.	Cross-account authorization is not allowed for cloud connections in the current account.	Check the cloud connections.
400	CC.1111	The network instance has been authorized.	The network instance has been authorized.	Check the authorized network instance.
400	CC.1171	Related bandwidth package is not available.	The bandwidth package is unavailable.	Contact customer service.
400	CC.1250	If an enterprise project has been enabled you need to specify the enterprise project when creating resources.	The enterprise project must be specified.	Specify an enterprise project when creating a resource.
400	CC.1269	To create a resource in an enterprise project, you need to apply it first.	The enterprise project must be specified.	Do not specify an enterprise project when creating a resource.
400	CC.1290	The cloud connection quota is insufficient.	Insufficient cloud connection quota.	Contact customer service.
400	CC.1291	No quotas for instance for this region.	The quota of network instances that can be loaded to the cloud connection in a single region is insufficient.	Contact customer service.

Status Code	Error Code	Error Message	Description	Handling Measure
400	CC.1292	No quotas for region for this cloudconnect.	The quota of regions where network instances can be loaded to the cloud connection is insufficient.	Contact customer service.
400	CC.1293	No quotas for route for this cloudconnect.	The quota of routes that can be configured for the cloud connection is insufficient.	Contact customer service.
401	CC.1003	The parameter of domainId is illegal.	Invalid account.	Ensure that the tenant ID is valid.
403	CC.1004	You do not have permission to operate.	Access denied.	Contact customer service.
404	CC.1002	The resource could not be found.	The resource was not found.	Enter correct resource information.
409	CC.1005	The resource already exists.	The resource already exists.	Do not create the resource repeatedly.
500	CC.1000	Internal Server Error.	Unknown internal error.	Contact customer service.
500	CC.1251	Internal Server Error.	Unknown internal error.	Contact customer service.

5.3 Obtaining a Project ID

Scenarios

A project ID is required for some URLs when an API is called. Therefore, you need to obtain a project ID in advance. Two methods are available:

- [Obtain the Project ID by Calling an API](#)

- [Obtain the Project ID from the Console](#)

Obtain the Project ID by Calling an API

You can obtain a project ID by calling the API used to [query projects based on specified criteria](#).

The API used to obtain a project ID is GET `https://{Endpoint}/v3/projects`. {Endpoint} is the IAM endpoint and can be obtained from [Regions and Endpoints](#). For details about API authentication, see [Authentication](#).

The following is an example response. The value of `id` is the project ID.

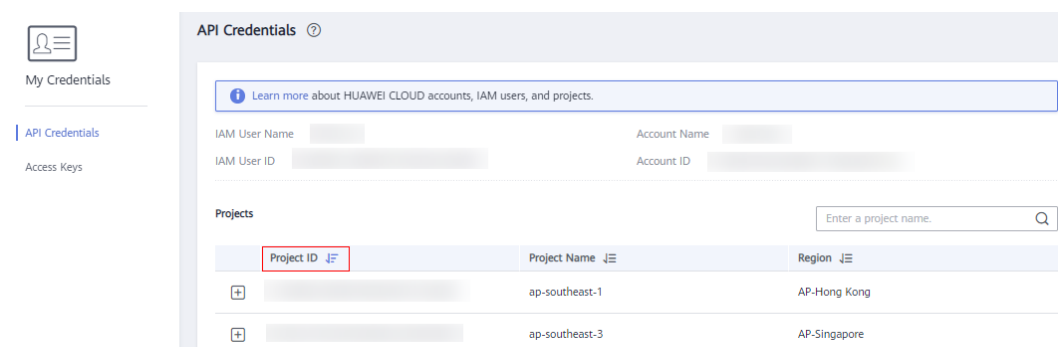
```
{
  "projects": [
    {
      "domain_id": "65ewtrgaggshhk1223245sghjlse684b",
      "is_domain": false,
      "parent_id": "65ewtrgaggshhk1223245sghjlse684b",
      "name": "project_name",
      "description": "",
      "links": {
        "next": null,
        "previous": null,
        "self": "https://www.example.com/v3/projects/a4adasfjljaaakla12334jklga9sasfg"
      },
      "id": "a4adasfjljaaakla12334jklga9sasfg",
      "enabled": true
    }
  ],
  "links": {
    "next": null,
    "previous": null,
    "self": "https://www.example.com/v3/projects"
  }
}
```

Obtain a Project ID from the Console

To obtain a project ID from the console, perform the following operations:

1. Log in to the management console.
2. Click the username and select **My Credentials** from the drop-down list.
On the **API Credentials** page, view the project ID in the project list.

Figure 5-1 Viewing the project ID



6 Historical APIs

6.1 Tag Management

6.1.1 Querying All Tags by Resource Type

Function

This API is used to query all the tags by resource type.

Calling Method

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

URI

GET /v3/{domain_id}/ccaas/{resource_type}/tags

Table 6-1 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
resource_type	Yes	String	Resource type. <ul style="list-style-type: none">• cloud-connection: cloud connection• bandwidth-package: bandwidth package

Request Parameters

Table 6-2 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 102400

Response Parameters

Status code: 200

Table 6-3 Response body parameters

Parameter	Type	Description
tags	Array of AggTag objects	Tag list. Array Length: 0 - 20
request_id	String	Request ID. Minimum: 0 Maximum: 36

Table 6-4 AggTag

Parameter	Type	Description
key	String	Tag key. Minimum: 1 Maximum: 128
values	Array of strings	List of values with the same key. Minimum: 0 Maximum: 255 Array Length: 1 - 10

Example Requests

Querying tags by resource type

```
GET https://{cc_endpoint}/v3/{domain_id}/ccaas/{resource_type}/tags
```

Example Responses

Status code: 200

Tags queried.

```
{
  "tags" : [ {
    "key" : "key1",
    "values" : [ "value1", "value2" ]
  }, {
    "key" : "key2",
    "values" : [ "value1", "value2" ]
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v2.region.CcRegion;
import com.huaweicloud.sdk.cc.v2.*;
import com.huaweicloud.sdk.cc.v2.model.*;

public class ListDomainTagsSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ListDomainTagsRequest request = new ListDomainTagsRequest();
        try {
            ListDomainTagsResponse response = client.listDomainTags(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  
  
from huaweicloudsdkcore.auth.credentials import GlobalCredentials  
from huaweicloudsdkcc.v2.region.cc_region import CcRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsdkcc.v2 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 = __import__('os').getenv("CLOUD_SDK_AK")  
    sk = __import__('os').getenv("CLOUD_SDK_SK")  
  
    credentials = GlobalCredentials(ak, sk) \  
  
    client = CcClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(CcRegion.value_of("<YOUR REGION>")) \  
        .build()  
  
    try:  
        request = ListDomainTagsRequest()  
        response = client.list_domain_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/global"  
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/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")  
  
    auth := global.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        Build()  
  
    client := cc.NewCcClient(  
        cc.CcClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).
```

```

Build()

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

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Tags queried.

Error Codes

See [Error Codes](#).

6.1.2 Deleting a Resource Tag

Function

This API is used to delete a resource tag.

Calling Method

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

URI

DELETE /v3/{domain_id}/ccaas/{resource_type}/{resource_id}/tags/{tag_key}

Table 6-5 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
resource_id	Yes	String	Resource ID. Minimum: 0 Maximum: 36

Parameter	Mandatory	Type	Description
tag_key	Yes	String	Key of the tag to be deleted. Minimum: 1 Maximum: 128
resource_type	Yes	String	Resource type. <ul style="list-style-type: none"> • cloud-connection: cloud connection • bandwidth-package: bandwidth package

Request Parameters

Table 6-6 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 102400

Response Parameters

None

Example Requests

Deleting a resource tag

```
DELETE https://{cc_endpoint}/v3/{domain_id}/ccaas/{resource_type}/{resource_id}/tags/{tag_key}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v2.region.CcRegion;
```

```
import com.huaweicloud.sdk.cc.v2.*;
import com.huaweicloud.sdk.cc.v2.model.*;

public class DeleteTagSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteTagRequest request = new DeleteTagRequest();
        try {
            DeleteTagResponse response = client.deleteTag(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v2.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.v2 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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = DeleteTagRequest()
        response = client.delete_tag(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	Tag deleted.

Error Codes

See [Error Codes](#).

6.1.3 Batch Creating or Deleting Tags

Function

This API is used to create or delete tags in batches.

Calling Method

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

URI

POST /v3/{domain_id}/ccaas/{resource_type}/{resource_id}/tags/action

Table 6-7 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
resource_id	Yes	String	Resource ID. Minimum: 0 Maximum: 36
resource_type	Yes	String	Resource type. <ul style="list-style-type: none"> • cloud-connection: cloud connection • bandwidth-package: bandwidth package

Request Parameters

Table 6-8 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 102400

Table 6-9 Request body parameters

Parameter	Mandatory	Type	Description
action	No	String	Operation to be performed. - create : To add a tag. - delete : To delete a tag.
tags	No	Array of Tag objects	Adding or deleting resource tags in batches Array Length: 0 - 20

Table 6-10 Tag

Parameter	Mandatory	Type	Description
key	No	String	Tag key. Minimum: 1 Maximum: 128
value	No	String	Tag value. Minimum: 0 Maximum: 255

Response Parameters

None

Example Requests

- Creating resource tags in batches (If the keys are the same, the values are updated. If there are no keys, the values are added.)

```
POST https://{cc_endpoint}/v3/{domain_id}/ccaas/{resource_type}/{resource_id}/tags/action
```

```
{
  "action": "create",
  "tags": [ {
    "key": "key1",
    "value": "value1"
  }, {
    "key": "key2",
    "value": "value3"
  } ]
}
```

- Deleting resource tags in batches by tag key

```
POST https://{cc_endpoint}/v3/{domain_id}/ccaas/{resource_type}/{resource_id}/tags/action
```

```
{
  "action": "delete",
  "tags": [ {
    "key": "key1",
    "value": "value1"
  }, {
    "key": "key2",
```

```
"value" : "value3"  
  } ]  
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

- Creating resource tags in batches (If the keys are the same, the values are updated. If there are no keys, the values are added.)

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.GlobalCredentials;  
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.cc.v2.region.CcRegion;  
import com.huaweicloud.sdk.cc.v2.*;  
import com.huaweicloud.sdk.cc.v2.model.*;  
  
import java.util.List;  
import java.util.ArrayList;  
  
public class BatchCreateDeleteTagsSolution {  
  
    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");  
  
        ICredential auth = new GlobalCredentials()  
            .withAk(ak)  
            .withSk(sk);  
  
        CcClient client = CcClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))  
            .build();  
        BatchCreateDeleteTagsRequest request = new BatchCreateDeleteTagsRequest();  
        ResourceTags body = new ResourceTags();  
        List<Tag> listbodyTags = new ArrayList<>();  
        listbodyTags.add(  
            new Tag()  
                .withKey("key1")  
                .withValue("value1")  
        );  
        listbodyTags.add(  
            new Tag()  
                .withKey("key2")  
                .withValue("value3")  
        );  
        body.withTags(listbodyTags);  
        request.withAction(ResourceTags.ActionEnum.fromValue("create"));  
        request.withBody(body);  
    }  
}
```

```
try {
    BatchCreateDeleteTagsResponse response = client.batchCreateDeleteTags(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());
}
}
```

- **Deleting resource tags in batches by tag key**

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v2.region.CcRegion;
import com.huaweicloud.sdk.cc.v2.*;
import com.huaweicloud.sdk.cc.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class BatchCreateDeleteTagsSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        BatchCreateDeleteTagsRequest request = new BatchCreateDeleteTagsRequest();
        ResourceTags body = new ResourceTags();
        List<Tag> listbodyTags = new ArrayList<>();
        listbodyTags.add(
            new Tag()
                .withKey("key1")
                .withValue("value1")
        );
        listbodyTags.add(
            new Tag()
                .withKey("key2")
                .withValue("value3")
        );
        body.withTags(listbodyTags);
        body.withAction(ResourceTags.ActionEnum.fromValue("delete"));
        request.withBody(body);
        try {
            BatchCreateDeleteTagsResponse response = client.batchCreateDeleteTags(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

- Creating resource tags in batches (If the keys are the same, the values are updated. If there are no keys, the values are added.)

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v2.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.v2 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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = BatchCreateDeleteTagsRequest()
        listTagsbody = [
            Tag(
                key="key1",
                value="value1"
            ),
            Tag(
                key="key2",
                value="value3"
            )
        ]
        request.body = ResourceTags(
            tags=listTagsbody,
            action="create"
        )
        response = client.batch_create_delete_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)
```

- Deleting resource tags in batches by tag key

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v2.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.v2 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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = BatchCreateDeleteTagsRequest()
        listTagsbody = [
            Tag(
                key="key1",
                value="value1"
            ),
            Tag(
                key="key2",
                value="value3"
            )
        ]
        request.body = ResourceTags(
            tags=listTagsbody,
            action="delete"
        )
        response = client.batch_create_delete_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

- Creating resource tags in batches (If the keys are the same, the values are updated. If there are no keys, the values are added.)

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/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")

auth := global.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    Build()

client := cc.NewCcClient(
    cc.CcClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.BatchCreateDeleteTagsRequest{}
keyTags:= "key1"
valueTags:= "value1"
keyTags1:= "key2"
valueTags1:= "value3"
var listTagsbody = []model.Tag{
    {
        Key: &keyTags,
        Value: &valueTags,
    },
    {
        Key: &keyTags1,
        Value: &valueTags1,
    },
}
actionResourceTags:= model.GetResourceTagsActionEnum().CREATE
request.Body = &model.ResourceTags{
    Tags: &listTagsbody,
    Action: &actionResourceTags,
}
response, err := client.BatchCreateDeleteTags(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

- Deleting resource tags in batches by tag key

```

package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(

```

```

cc.CcClientBuilder().
    WithRegion(region.ValueOf("<YOUR REGION>")).
    WithCredential(auth).
    Build())

request := &model.BatchCreateDeleteTagsRequest{
keyTags:= "key1"
valueTags:= "value1"
keyTags1:= "key2"
valueTags1:= "value3"
var listTagsbody = []model.Tag{
    {
        Key: &keyTags,
        Value: &valueTags,
    },
    {
        Key: &keyTags1,
        Value: &valueTags1,
    },
}
}
actionResourceTags:= model.GetResourceTagsActionEnum().DELETE
request.Body = &model.ResourceTags{
    Tags: &listTagsbody,
    Action: &actionResourceTags,
}
response, err := client.BatchCreateDeleteTags(request)
if err == nil {
    fmt.Printf("%v\n", response)
} else {
    fmt.Println(err)
}
}
    
```

More

For SDK sample code of more programming languages, see the [Sample Code](#) tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	Tags are created or deleted.

Error Codes

See [Error Codes](#).

6.1.4 Querying Resources

Function

This API is used to query resources by resource type.

Calling Method

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

URI

POST /v3/{domain_id}/ccaas/{resource_type}/resource-instances/action

Table 6-11 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
resource_type	Yes	String	Resource type. <ul style="list-style-type: none"> • cloud-connection: cloud connection • bandwidth-package: bandwidth package

Request Parameters

Table 6-12 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 102400

Table 6-13 Request body parameters

Parameter	Mandatory	Type	Description
action	No	String	Action. <ul style="list-style-type: none"> • filter: queries specific resources based on query criteria. • count: queries the total number of resources.
limit	No	Integer	Maximum records that can be displayed on one page. Minimum: 1 Maximum: 1000.0

Parameter	Mandatory	Type	Description
offset	No	Integer	Query result offset. Minimum: 0 Maximum: 999
tags	No	Array of AggTag objects	Whether the following tags are contained. (If there are multiple keys, they are in the AND relationship. If there are multiple values, they are in the OR relationship.) Array Length: 0 - 50
matches	No	Array of Tag objects	Whether to match the following tags. The key must be resource_name . If the value is set, fuzzy matching is used. If the value is an empty string, exact matching is used. Array Length: 0 - 50

Table 6-14 AggTag

Parameter	Mandatory	Type	Description
key	No	String	Tag key. Minimum: 1 Maximum: 128
values	No	Array of strings	List of values with the same key. Minimum: 0 Maximum: 255 Array Length: 1 - 10

Table 6-15 Tag

Parameter	Mandatory	Type	Description
key	No	String	Tag key. Minimum: 1 Maximum: 128

Parameter	Mandatory	Type	Description
value	No	String	Tag value. Minimum: 0 Maximum: 255

Response Parameters

Status code: 200

Table 6-16 Response body parameters

Parameter	Type	Description
resources	Array of FilterTagResource objects	Resource list. Array Length: 0 - 2000
request_id	String	Request ID. Minimum: 0 Maximum: 36
total_count	Integer	Total number of resources that meet the query criteria. Minimum: 0 Maximum: 2000.0

Table 6-17 FilterTagResource

Parameter	Type	Description
resource_id	String	Resource ID. Minimum: 0 Maximum: 36
resource_name	String	Resource name. Minimum: 0 Maximum: 64
resource_detail	String	Resource details. Minimum: 0 Maximum: 255
tags	Array of Tag objects	Tags added for a resource. Array Length: 0 - 20

Table 6-18 Tag

Parameter	Type	Description
key	String	Tag key. Minimum: 1 Maximum: 128
value	String	Tag value. Minimum: 0 Maximum: 255

Example Requests

- Querying resource details using specified filter criteria

POST https://{cc_endpoint}/v3/{domain_id}/ccaas/{resource_type}/resource-instances/action

```
{
  "offset": "0",
  "limit": "100",
  "action": "filter",
  "matches": [ {
    "key": "resource_name",
    "value": "resource1"
  } ],
  "tags": [ {
    "key": "key1",
    "values": [ "value1", "value2" ]
  } ]
}
```

- Querying resource quantity using specified filter criteria

POST https://{cc_endpoint}/v3/{domain_id}/ccaas/cloud-connection/resource-instances/action

```
{
  "action": "count",
  "tags": [ {
    "key": "key1",
    "values": [ "value1", "value2" ]
  }, {
    "key": "key2",
    "values": [ "value1", "value2" ]
  } ],
  "matches": [ {
    "key": "resource_name",
    "value": "resource1"
  } ]
}
```

Example Responses

Status code: 200

Resources found.

```
{
  "resources": [ {
    "resource_id": "cdfs_cefs_wesas_12_dsad",
    "resource_name": "resouece1",
    "tags": [ {
      "key": "key1",
```

```
"value" : "value1"
}, {
  "key" : "key2",
  "value" : "value1"
}]
}],
"request_id" : "XXX",
"total_count" : 1000
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

- Querying resource details using specified filter criteria

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v2.region.CcRegion;
import com.huaweicloud.sdk.cc.v2.*;
import com.huaweicloud.sdk.cc.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListResourceByFilterTagSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ListResourceByFilterTagRequest request = new ListResourceByFilterTagRequest();
        ListResourceByFilterTagRequestBody body = new ListResourceByFilterTagRequestBody();
        List<Tag> listbodyMatches = new ArrayList<>();
        listbodyMatches.add(
            new Tag()
                .withKey("resource_name")
                .withValue("resource1")
        );
        List<String> listTagsValues = new ArrayList<>();
        listTagsValues.add("value1");
        listTagsValues.add("value2");
        List<AggTag> listbodyTags = new ArrayList<>();
        listbodyTags.add(
            new AggTag()
                .withKey("key1")
                .withValues(listTagsValues)
        );
    }
}
```

```
);
body.withMatches(listbodyMatches);
body.withTags(listbodyTags);
body.withOffset(0);
body.withLimit(100);
body.withAction(ListResourceByFilterTagRequestBody.ActionEnum.fromValue("filter"));
request.withBody(body);
try {
    ListResourceByFilterTagResponse response = client.listResourceByFilterTag(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());
}
}
```

- Querying resource quantity using specified filter criteria

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v2.region.CcRegion;
import com.huaweicloud.sdk.cc.v2.*;
import com.huaweicloud.sdk.cc.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListResourceByFilterTagSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ListResourceByFilterTagRequest request = new ListResourceByFilterTagRequest();
        ListResourceByFilterTagRequestBody body = new ListResourceByFilterTagRequestBody();
        List<Tag> listbodyMatches = new ArrayList<>();
        listbodyMatches.add(
            new Tag()
                .withKey("resource_name")
                .withValue("resource1")
        );
        List<String> listTagsValues = new ArrayList<>();
        listTagsValues.add("value1");
        listTagsValues.add("value2");
```

```
List<String> listTagsValues1 = new ArrayList<>();
listTagsValues1.add("value1");
listTagsValues1.add("value2");
List<AggTag> listbodyTags = new ArrayList<>();
listbodyTags.add(
    new AggTag()
        .withKey("key1")
        .withValues(listTagsValues1)
);
listbodyTags.add(
    new AggTag()
        .withKey("key2")
        .withValues(listTagsValues)
);
body.withMatches(listbodyMatches);
body.withTags(listbodyTags);
body.withAction(ListResourceByFilterTagRequestBody.ActionEnum.fromValue("count"));
request.withBody(body);
try {
    ListResourceByFilterTagResponse response = client.listResourceByFilterTag(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

- Querying resource details using specified filter criteria

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v2.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.v2 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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ListResourceByFilterTagRequest()
        listMatchesbody = [
            Tag(
                key="resource_name",
                value="resource1"
            )
        ]
```

```
]
listValuesTags = [
    "value1",
    "value2"
]
listTagsbody = [
    AggTag(
        key="key1",
        values=listValuesTags
    )
]
request.body = ListResourceByFilterTagRequestBody(
    matches=listMatchesbody,
    tags=listTagsbody,
    offset=0,
    limit=100,
    action="filter"
)
response = client.list_resource_by_filter_tag(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

- Querying resource quantity using specified filter criteria

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v2.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.v2 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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ListResourceByFilterTagRequest()
        listMatchesbody = [
            Tag(
                key="resource_name",
                value="resource1"
            )
        ]
        listValuesTags = [
            "value1",
            "value2"
        ]
        listValuesTags1 = [
            "value1",
            "value2"
        ]
        listTagsbody = [
            AggTag(
                key="key1",
```

```
        values=listValuesTags1
    ),
    AggTag(
        key="key2",
        values=listValuesTags
    )
]
request.body = ListResourceByFilterTagRequestBody(
    matches=listMatchesbody,
    tags=listTagsbody,
    action="count"
)
response = client.list_resource_by_filter_tag(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

- Querying resource details using specified filter criteria

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListResourceByFilterTagRequest{}
    keyMatches:= "resource_name"
    valueMatches:= "resource1"
    var listMatchesbody = []model.Tag{
        {
            Key: &keyMatches,
            Value: &valueMatches,
        },
    }
    var listValuesTags = []string{
        "value1",
        "value2",
    }
    keyTags:= "key1"
    var listTagsbody = []model.AggTag{
```



```
    {
        Key: &keyTags,
        Values: &listValuesTags,
    },
}
offsetListResourceByFilterTagRequestBody:= int32(0)
limitListResourceByFilterTagRequestBody:= int32(100)
actionListResourceByFilterTagRequestBody:=
model.GetListResourceByFilterTagRequestBodyActionEnum().FILTER
request.Body = &model.ListResourceByFilterTagRequestBody{
    Matches: &listMatchesbody,
    Tags: &listTagsbody,
    Offset: &offsetListResourceByFilterTagRequestBody,
    Limit: &limitListResourceByFilterTagRequestBody,
    Action: &actionListResourceByFilterTagRequestBody,
}
response, err := client.ListResourceByFilterTag(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

- Querying resource quantity using specified filter criteria

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListResourceByFilterTagRequest{
        keyMatches:= "resource_name"
        valueMatches:= "resource1"
        var listMatchesbody = []model.Tag{
            {
                Key: &keyMatches,
                Value: &valueMatches,
            },
        }
        var listValuesTags = []string{
            "value1",
            "value2",
        }
        var listValuesTags1 = []string{
```

```
    "value1",
    "value2",
  }
  keyTags:= "key1"
  keyTags1:= "key2"
  var listTagsbody = []model.AggTag{
    {
      Key: &keyTags,
      Values: &listValuesTags1,
    },
    {
      Key: &keyTags1,
      Values: &listValuesTags,
    },
  }
  actionListResourceByFilterTagRequestBody:=
model.GetListResourceByFilterTagRequestBodyActionEnum().COUNT
  request.Body = &model.ListResourceByFilterTagRequestBody{
    Matches: &listMatchesbody,
    Tags: &listTagsbody,
    Action: &actionListResourceByFilterTagRequestBody,
  }
  response, err := client.ListResourceByFilterTag(request)
  if err == nil {
    fmt.Printf("%+v\n", response)
  } else {
    fmt.Println(err)
  }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Resources found.

Error Codes

See [Error Codes](#).

6.1.5 Querying Resource Tags

Function

Querying all the tags by resource type

Calling Method

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

URI

GET /v3/{domain_id}/ccaas/{resource_type}/{resource_id}/tags

Table 6-19 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
resource_type	Yes	String	Resource type. <ul style="list-style-type: none"> • cloud-connection: cloud connection • bandwidth-package: bandwidth package
resource_id	Yes	String	Resource ID. Minimum: 0 Maximum: 36

Request Parameters

Table 6-20 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 102400

Response Parameters

Status code: 200

Table 6-21 Response body parameters

Parameter	Type	Description
tags	Array of Tag objects	Tag list. Array Length: 0 - 20
request_id	String	Request ID. Minimum: 0 Maximum: 36

Table 6-22 Tag

Parameter	Type	Description
key	String	Tag key. Minimum: 1 Maximum: 128
value	String	Tag value. Minimum: 0 Maximum: 255

Example Requests

Querying all the resource tags

```
GET https://{cc_endpoint}/v3/{domain_id}/ccaas/{resource_type}/{resource_id}/tags
```

Example Responses

Status code: 200

Tags queried.

```
{
  "tags" : [ {
    "key" : "key1",
    "value" : "value1"
  }, {
    "key" : "key2",
    "value" : "value3"
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v2.region.CcRegion;
import com.huaweicloud.sdk.cc.v2.*;
import com.huaweicloud.sdk.cc.v2.model.*;

public class ListTagsSolution {

    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");

ICredential auth = new GlobalCredentials()
    .withAk(ak)
    .withSk(sk);

CcClient client = CcClient.newBuilder()
    .withCredential(auth)
    .withRegion(CcRegion.valueOf("<YOUR REGION>"))
    .build();
ListTagsRequest request = new ListTagsRequest();
try {
    ListTagsResponse response = client.listTags(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdccc.v2.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdccc.v2 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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ListTagsRequest()
        response = client.list_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/global"  
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/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")  
  
    auth := global.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        Build()  
  
    client := cc.NewCcClient(  
        cc.CcClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).  
            Build()  
    )  
  
    request := &model.ListTagsRequest{}  
    response, err := client.ListTags(request)  
    if err == nil {  
        fmt.Printf("%+v\n", response)  
    } else {  
        fmt.Println(err)  
    }  
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Tags queried.

Error Codes

See [Error Codes](#).

6.1.6 Adding a Resource Tag

Function

This API is used to add a tag to a resource.

Calling Method

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

URI

POST /v3/{domain_id}/ccaas/{resource_type}/{resource_id}/tags

Table 6-23 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. Minimum: 10 Maximum: 32
resource_id	Yes	String	Resource ID. Minimum: 0 Maximum: 36
resource_type	Yes	String	Resource type. <ul style="list-style-type: none"> • cloud-connection: cloud connection • bandwidth-package: bandwidth package

Request Parameters

Table 6-24 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 102400

Table 6-25 Request body parameters

Parameter	Mandatory	Type	Description
tag	No	Tag object	Key-value pair.

Table 6-26 Tag

Parameter	Mandatory	Type	Description
key	No	String	Tag key. Minimum: 1 Maximum: 128
value	No	String	Tag value. Minimum: 0 Maximum: 255

Response Parameters

None

Example Requests

Adding a resource tag

```
POST https://{cc_endpoint}/v3/{domain_id}/ccaas/{resource_type}/{resource_id}/tags
{
  "tag": {
    "key": "key1",
    "value": "value1"
  }
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Adding a resource tag

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v2.region.CcRegion;
import com.huaweicloud.sdk.cc.v2.*;
import com.huaweicloud.sdk.cc.v2.model.*;

public class CreateTagSolution {

    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");

ICredential auth = new GlobalCredentials()
    .withAk(ak)
    .withSk(sk);

CcClient client = CcClient.newBuilder()
    .withCredential(auth)
    .withRegion(CcRegion.valueOf("<YOUR REGION>"))
    .build();
CreateTagRequest request = new CreateTagRequest();
CreateTagRequestBody body = new CreateTagRequestBody();
Tag tagbody = new Tag();
tagbody.withKey("key1")
    .withValue("value1");
body.withTag(tagbody);
request.withBody(body);
try {
    CreateTagResponse response = client.createTag(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

Adding a resource tag

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v2.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.v2 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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = CreateTagRequest()
        tagbody = Tag(
```

```
        key="key1",
        value="value1"
    )
    request.body = CreateTagRequestBody(
        tag=tagbody
    )
    response = client.create_tag(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

Adding a resource tag

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateTagRequest{}
    keyTag := "key1"
    valueTag := "value1"
    tagbody := &model.Tag{
        Key: &keyTag,
        Value: &valueTag,
    }
    request.Body = &model.CreateTagRequestBody{
        Tag: tagbody,
    }
    response, err := client.CreateTag(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	Tag added.

Error Codes

See [Error Codes](#).

6.2 Global Private Bandwidth Tag Management

6.2.1 Querying a Global Private Bandwidth Tag in an Account

Function

This API is used to query a global private bandwidth tag in an account.

Calling Method

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

URI

GET /v3/gcb/{resource_id}/tags

Table 6-27 Path Parameters

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Unique identifier of a resource. Minimum: 0 Maximum: 64

Request Parameters

Table 6-28 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. Minimum: 0 Maximum: 102400

Response Parameters

Status code: 200**Table 6-29** Response body parameters

Parameter	Type	Description
tags	Array of Tag objects	Tag list. Array Length: 0 - 20
request_id	String	Request ID. Minimum: 0 Maximum: 36

Table 6-30 Tag

Parameter	Type	Description
key	String	Tag key. Minimum: 1 Maximum: 128
value	String	Tag value. Minimum: 0 Maximum: 255

Example Requests

Querying a global private bandwidth tag in an account

GET https://{cc_endpoint}/v3/gcb/{resource_id}/tags

Example Responses

Status code: 200

The global private bandwidth tag has been queried.

```
{
  "tags" : [ {
    "key" : "DEV",
    "value" : "DEV1"
  } ],
  "request_id" : "d6bf8eeb1f2b6e503e88f3dc3024c7e7"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v2.region.CcRegion;
import com.huaweicloud.sdk.cc.v2.*;
import com.huaweicloud.sdk.cc.v2.model.*;

public class ListGcbResourceTagsSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ListGcbResourceTagsRequest request = new ListGcbResourceTagsRequest();
        try {
            ListGcbResourceTagsResponse response = client.listGcbResourceTags(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v2.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.v2 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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ListGcbResourceTagsRequest()
        response = client.list_gcb_resource_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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListGcbResourceTagsRequest{}
    response, err := client.ListGcbResourceTags(request)
```

```

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

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The global private bandwidth tag has been queried.

Error Codes

See [Error Codes](#).

6.2.2 Adding a Tag to a Global Private Bandwidth

Function

This API is used to add a tag to a global private bandwidth.

Calling Method

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

URI

POST /v3/gcb/{resource_id}/tags

Table 6-31 Path Parameters

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Unique identifier of a resource. Minimum: 0 Maximum: 64

Request Parameters

Table 6-32 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. Minimum: 0 Maximum: 102400

Table 6-33 Request body parameters

Parameter	Mandatory	Type	Description
tag	Yes	RequiredTag object	Key-value pair.

Table 6-34 RequiredTag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. Minimum: 1 Maximum: 128
value	Yes	String	Tag value. Minimum: 0 Maximum: 255

Response Parameters

None

Example Requests

Adding a tag to a global private bandwidth

```
POST https://{cc_endpoint}/v3/gcb/{resource_id}/tags
```

```
{
  "tag": {
    "key": "DEV",
    "value": "DEV1"
  }
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Adding a tag to a global private bandwidth

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v2.region.CcRegion;
import com.huaweicloud.sdk.cc.v2.*;
import com.huaweicloud.sdk.cc.v2.model.*;

public class CreateGcbResourceTagSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateGcbResourceTagRequest request = new CreateGcbResourceTagRequest();
        CreateGcbTagRequestBody body = new CreateGcbTagRequestBody();
        RequiredTag tagbody = new RequiredTag();
        tagbody.withKey("DEV")
            .withValue("DEV1");
        body.withTag(tagbody);
        request.withBody(body);
        try {
            CreateGcbResourceTagResponse response = client.createGcbResourceTag(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

Adding a tag to a global private bandwidth

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v2.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.v2 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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = CreateGcbResourceTagRequest()
        tagbody = RequiredTag(
            key="DEV",
            value="DEV1"
        )
        request.body = CreateGcbTagRequestBody(
            tag=tagbody
        )
        response = client.create_gcb_resource_tag(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

Adding a tag to a global private bandwidth

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
```

```
cc.CcClientBuilder().
  WithRegion(region.ValueOf("<YOUR REGION>")).
  WithCredential(auth).
  Build())

request := &model.CreateGcbResourceTagRequest{}
tagbody := &model.RequiredTag{
  Key: "DEV",
  Value: "DEV1",
}
request.Body = &model.CreateGcbTagRequestBody{
  Tag: tagbody,
}
response, err := client.CreateGcbResourceTag(request)
if err == nil {
  fmt.Printf("%+v\n", response)
} else {
  fmt.Println(err)
}
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	The operation is successful.

Error Codes

See [Error Codes](#).

6.2.3 Deleting a Global Private Bandwidth Tag

Function

This API is used to delete a tag from a global private bandwidth.

Calling Method

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

URI

DELETE /v3/gcb/{resource_id}/tags/{tag_key}

Table 6-35 Path Parameters

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Unique identifier of a resource. Minimum: 0 Maximum: 64
tag_key	Yes	String	Key of the tag to be deleted. Minimum: 0 Maximum: 128

Request Parameters

Table 6-36 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. Minimum: 0 Maximum: 102400

Response Parameters

None

Example Requests

Deleting a global private bandwidth tag

```
DELETE https://{cc_endpoint}/v3/gcb/{resource_id}/tags/{tag_key}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v2.region.CcRegion;
import com.huaweicloud.sdk.cc.v2.*;
```

```
import com.huaweicloud.sdk.cc.v2.model.*;

public class DeleteGcbResourceTagSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteGcbResourceTagRequest request = new DeleteGcbResourceTagRequest();
        try {
            DeleteGcbResourceTagResponse response = client.deleteGcbResourceTag(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v2.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.v2 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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = DeleteGcbResourceTagRequest()
        response = client.delete_gcb_resource_tag(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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	The operation is successful.

Error Codes

See [Error Codes](#).

6.2.4 Adding Tags to a Global Private Bandwidth

Function

This API is used to add tags to a global private bandwidth.

Calling Method

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

URI

POST /v3/gcb/{resource_id}/tags/create

Table 6-37 Path Parameters

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Unique identifier of a resource. Minimum: 0 Maximum: 64

Request Parameters

Table 6-38 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. Minimum: 0 Maximum: 102400

Table 6-39 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of RequiredTag objects	Resource tags to be added or deleted. Array Length: 0 - 20

Table 6-40 RequiredTag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. Minimum: 1 Maximum: 128
value	Yes	String	Tag value. Minimum: 0 Maximum: 255

Response Parameters

None

Example Requests

Adding tags to a global private bandwidth

```
POST https://{cc_endpoint}/v3/gcb/{resource_id}/tags/create
```

```
{
  "tags": [ {
    "key": "key1",
    "value": "value1"
  }, {
    "key": "key2",
    "value": "value2"
  } ]
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Adding tags to a global private bandwidth

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v2.region.CcRegion;
import com.huaweicloud.sdk.cc.v2.*;
import com.huaweicloud.sdk.cc.v2.model.*;

import java.util.List;
import java.util.ArrayList;
```



```
public class BatchCreateGcbResourceTagsSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        BatchCreateGcbResourceTagsRequest request = new BatchCreateGcbResourceTagsRequest();
        CreateDeleteGcbTagsRequestBody body = new CreateDeleteGcbTagsRequestBody();
        List<RequiredTag> listbodyTags = new ArrayList<>();
        listbodyTags.add(
            new RequiredTag()
                .withKey("key1")
                .withValue("value1")
        );
        listbodyTags.add(
            new RequiredTag()
                .withKey("key2")
                .withValue("value2")
        );
        body.withTags(listbodyTags);
        request.withBody(body);
        try {
            BatchCreateGcbResourceTagsResponse response = client.batchCreateGcbResourceTags(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

Adding tags to a global private bandwidth

```
# coding: utf-8
```

```
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v2.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.v2 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 = __import__('os').getenv("CLOUD_SDK_AK")
sk = __import__('os').getenv("CLOUD_SDK_SK")

credentials = GlobalCredentials(ak, sk) \

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

try:
    request = BatchCreateGcbResourceTagsRequest()
    listTagsbody = [
        RequiredTag(
            key="key1",
            value="value1"
        ),
        RequiredTag(
            key="key2",
            value="value2"
        )
    ]
    request.body = CreateDeleteGcbTagsRequestBody(
        tags=listTagsbody
    )
    response = client.batch_create_gcb_resource_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

Adding tags to a global private bandwidth

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.BatchCreateGcbResourceTagsRequest{}
    var listTagsbody = []model.RequiredTag{
```

```

    {
      Key: "key1",
      Value: "value1",
    },
    {
      Key: "key2",
      Value: "value2",
    },
  ],
}
request.Body = &model.CreateDeleteGcbTagsRequestBody{
  Tags: listTagsbody,
}
response, err := client.BatchCreateGcbResourceTags(request)
if err == nil {
  fmt.Printf("%+v\n", response)
} else {
  fmt.Println(err)
}
}

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	Tags have been added to the global private bandwidth.

Error Codes

See [Error Codes](#).

6.2.5 Deleting Global Private Bandwidth Tags

Function

This API is used to delete tags from a global private bandwidth.

Calling Method

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

URI

POST /v3/gcb/{resource_id}/tags/delete

Table 6-41 Path Parameters

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Unique identifier of a resource. Minimum: 0 Maximum: 64

Request Parameters

Table 6-42 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. Minimum: 0 Maximum: 102400

Table 6-43 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of RequiredTag objects	Resource tags to be added or deleted. Array Length: 0 - 20

Table 6-44 RequiredTag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. Minimum: 1 Maximum: 128
value	Yes	String	Tag value. Minimum: 0 Maximum: 255

Response Parameters

None

Example Requests

Deleting tags from a global private bandwidth

```
DELETE https://{cc_endpoint}/v3/gcb/{resource_id}/tags/delete

{
  "tags" : [ {
    "key" : "key1",
    "value" : "value1"
  }, {
    "key" : "key2",
    "value" : "value2"
  } ]
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Deleting tags from a global private bandwidth

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v2.region.CcRegion;
import com.huaweicloud.sdk.cc.v2.*;
import com.huaweicloud.sdk.cc.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class BatchDeleteGcbResourceTagsSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        BatchDeleteGcbResourceTagsRequest request = new BatchDeleteGcbResourceTagsRequest();
        CreateDeleteGcbTagsRequestBody body = new CreateDeleteGcbTagsRequestBody();
        List<RequiredTag> listbodyTags = new ArrayList<>();
        listbodyTags.add(
            new RequiredTag()
```

```
        .withKey("key1")
        .withValue("value1")
    );
    listbodyTags.add(
        new RequiredTag()
            .withKey("key2")
            .withValue("value2")
    );
    body.withTags(listbodyTags);
    request.withBody(body);
    try {
        BatchDeleteGcbResourceTagsResponse response = client.batchDeleteGcbResourceTags(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

Deleting tags from a global private bandwidth

```
# coding: utf-8
```

```
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v2.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.v2 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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")
```

```
    credentials = GlobalCredentials(ak, sk) \
```

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

```
    try:
```

```
        request = BatchDeleteGcbResourceTagsRequest()
```

```
        listTagsbody = [
```

```
            RequiredTag(
                key="key1",
                value="value1"
```

```
            ),
```

```
            RequiredTag(
                key="key2",
                value="value2"
```

```
        )
```

```
    ]
```

```
    request.body = CreateDeleteGcbTagsRequestBody(
        tags=listTagsbody
    )
```

```
response = client.batch_delete_gcb_resource_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

Deleting tags from a global private bandwidth

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.BatchDeleteGcbResourceTagsRequest{}
    var listTagsbody = []model.RequiredTag{
        {
            Key: "key1",
            Value: "value1",
        },
        {
            Key: "key2",
            Value: "value2",
        },
    }
    request.Body = &model.CreateDeleteGcbTagsRequestBody{
        Tags: listTagsbody,
    }
    response, err := client.BatchDeleteGcbResourceTags(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	Tags have been deleted from the global private bandwidth.

Error Codes

See [Error Codes](#).

6.2.6 Querying the Number of Global Private Bandwidth Tags in an Account

Function

This API is used to query the number of global private bandwidth tags in an account.

Calling Method

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

URI

POST /v3/gcb/resource-instances/count

Request Parameters

Table 6-45 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. Minimum: 0 Maximum: 102400

Table 6-46 Request body parameters

Parameter	Mandatory	Type	Description
request_id	No	String	Request ID. Minimum: 0 Maximum: 36

Parameter	Mandatory	Type	Description
without_any_tag	No	Boolean	If this parameter is set to true , all resources without tags are queried. In this case, the tags , tags_any , not_tags , and not_tags_any fields are not required.
tags	No	Array of QueryTag objects	The instances to be queried contain tags listed in tags . Each instance to be queried contains a maximum of 20 keys. Each tag key has a maximum of 10 tag values. The tag value corresponding to each tag key can be an empty array but the structure cannot be missing. Each tag key must be unique, and each tag value for a tag key must be unique. The response returns instances containing all tags in this list. Keys in this list are in the AND relationship and values in each key-value structure are in the OR relationship. If no tag filtering condition is specified, full data is returned. Array Length: 0 - 50

Parameter	Mandatory	Type	Description
tags_any	No	Array of QueryTag objects	<p>The instances to be queried contain any tag listed in tags_any. Each instance to be queried contains a maximum of 20 keys. Each tag key has a maximum of 10 tag values. The tag value corresponding to each tag key can be an empty array but the structure cannot be missing. Each tag key must be unique, and each tag value for a tag key must be unique. The response returns instances containing any tag in this list. Keys in this list are in the OR relationship and values in each key-value structure are also in the OR relationship. If no tag filtering criteria is specified, full data is returned.</p> <p>Array Length: 0 - 50</p>
not_tags	No	Array of QueryTag objects	<p>The instances to be queried do not contain any tag listed in not_tags. Each instance to be queried contains a maximum of 20 keys. Each tag key has a maximum of 10 tag values. The tag value corresponding to each tag key can be an empty array but the structure cannot be missing. Each tag key must be unique, and each tag value for a tag key must be unique. The response returns resources containing no tags in this list. Keys in this list are in the AND relationship and values in each key-value structure are in the OR relationship. If no tag filtering criteria is specified, full data is returned.</p> <p>Array Length: 0 - 50</p>

Parameter	Mandatory	Type	Description
not_tags_any	No	Array of QueryTag objects	The instances to be queried do not contain all tags listed in not_tags_any . Each instance to be queried contains a maximum of 20 keys. Each tag key has a maximum of 10 tag values. The tag value corresponding to each tag key can be an empty array but the structure cannot be missing. Each tag key must be unique, and each tag value for a tag key must be unique. The response returns resources containing no tag in this list. Keys in this list are in the OR relationship and values in each key-value structure are also in the OR relationship. If no tag filtering criteria is specified, full data is returned. Array Length: 0 - 50
matches	No	Array of TmsMatch objects	Whether to match the tags: The tag key is set to resource_name . If there is a tag value, fuzzy matching is used. If the tag value is an empty string, exact matching is used. Array Length: 0 - 50

Table 6-47 QueryTag

Parameter	Mandatory	Type	Description
key	Yes	String	Key. Minimum: 0 Maximum: 128
values	Yes	Array of strings	Tag value list. Minimum: 0 Maximum: 255 Array Length: 1 - 10

Table 6-48 TmsMatch

Parameter	Mandatory	Type	Description
key	Yes	String	Key. Currently, only resource_name is supported. Other key values will be available later. Minimum: 1 Maximum: 128
value	Yes	String	Tag value. Minimum: 0 Maximum: 255

Response Parameters

Status code: 200

Table 6-49 Response body parameters

Parameter	Type	Description
total_count	Integer	Total number of records. Minimum: 0 Maximum: 2000.0
request_id	String	Request ID. Minimum: 0 Maximum: 36

Example Requests

Querying the number of global private bandwidth tags in an account

POST https://{cc_endpoint}/v3/gcb/resource-instances/count

```
{
  "not_tags" : [ {
    "key" : "key1",
    "values" : [ "value1", "value2" ]
  } ],
  "tags" : [ {
    "key" : "key1",
    "values" : [ "value1", "value2" ]
  } ],
  "tags_any" : [ {
    "key" : "key1",
    "values" : [ "value1", "value2" ]
  } ],
  "not_tags_any" : [ {
    "key" : "key1",
    "values" : [ "value1", "value2" ]
  } ]
}
```

```
    }],  
    "matches" : [ {  
      "key" : "resource_name",  
      "value" : "resource1"  
    } ]  
  }  
}
```

Example Responses

Status code: 200

The number of global private bandwidth tags in an account has been queried.

```
{  
  "request_id" : "e3371202-7e85-4c16-bb4b-4e3c092734f7",  
  "total_count" : 1  
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Querying the number of global private bandwidth tags in an account

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.GlobalCredentials;  
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.cc.v2.region.CcRegion;  
import com.huaweicloud.sdk.cc.v2.*;  
import com.huaweicloud.sdk.cc.v2.model.*;  
  
import java.util.List;  
import java.util.ArrayList;  
  
public class CountGcbResourceByTagSolution {  
  
    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");  
  
        ICredential auth = new GlobalCredentials()  
            .withAk(ak)  
            .withSk(sk);  
  
        CcClient client = CcClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))  
            .build();  
        CountGcbResourceByTagRequest request = new CountGcbResourceByTagRequest();  
        QueryResourceByTagRequestBody body = new QueryResourceByTagRequestBody();  
        List<TmsMatch> listbodyMatches = new ArrayList<>();  
        listbodyMatches.add(  
            new TmsMatch()  
                .withKey("resource_name")  
                .withValue("resource1")  
        );  
    }  
}
```

```
);
List<String> listNotTagsAnyValues = new ArrayList<>();
listNotTagsAnyValues.add("value1");
listNotTagsAnyValues.add("value2");
List<QueryTag> listbodyNotTagsAny = new ArrayList<>();
listbodyNotTagsAny.add(
    new QueryTag()
        .withKey("key1")
        .withValues(listNotTagsAnyValues)
);
List<String> listNotTagsValues = new ArrayList<>();
listNotTagsValues.add("value1");
listNotTagsValues.add("value2");
List<QueryTag> listbodyNotTags = new ArrayList<>();
listbodyNotTags.add(
    new QueryTag()
        .withKey("key1")
        .withValues(listNotTagsValues)
);
List<String> listTagsAnyValues = new ArrayList<>();
listTagsAnyValues.add("value1");
listTagsAnyValues.add("value2");
List<QueryTag> listbodyTagsAny = new ArrayList<>();
listbodyTagsAny.add(
    new QueryTag()
        .withKey("key1")
        .withValues(listTagsAnyValues)
);
List<String> listTagsValues = new ArrayList<>();
listTagsValues.add("value1");
listTagsValues.add("value2");
List<QueryTag> listbodyTags = new ArrayList<>();
listbodyTags.add(
    new QueryTag()
        .withKey("key1")
        .withValues(listTagsValues)
);
body.withMatches(listbodyMatches);
body.withNotTagsAny(listbodyNotTagsAny);
body.withNotTags(listbodyNotTags);
body.withTagsAny(listbodyTagsAny);
body.withTags(listbodyTags);
request.withBody(body);
try {
    CountGcbResourceByTagResponse response = client.countGcbResourceByTag(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

Querying the number of global private bandwidth tags in an account

```
# coding: utf-8
```

```
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v2.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
```

```
from huaweicloudsdkcc.v2 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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = CountGcbResourceByTagRequest()
        listMatchesbody = [
            TmsMatch(
                key="resource_name",
                value="resource1"
            )
        ]
        listValuesNotTagsAny = [
            "value1",
            "value2"
        ]
        listNotTagsAnybody = [
            QueryTag(
                key="key1",
                values=listValuesNotTagsAny
            )
        ]
        listValuesNotTags = [
            "value1",
            "value2"
        ]
        listNotTagsbody = [
            QueryTag(
                key="key1",
                values=listValuesNotTags
            )
        ]
        listValuesTagsAny = [
            "value1",
            "value2"
        ]
        listTagsAnybody = [
            QueryTag(
                key="key1",
                values=listValuesTagsAny
            )
        ]
        listValuesTags = [
            "value1",
            "value2"
        ]
        listTagsbody = [
            QueryTag(
                key="key1",
                values=listValuesTags
            )
        ]
        request.body = QueryResourceByTagRequestBody(
            matches=listMatchesbody,
            not_tags_any=listNotTagsAnybody,
```

```
        not_tags=listNotTagsbody,  
        tags_any=listTagsAnybody,  
        tags=listTagsbody  
    )  
    response = client.count_gcb_resource_by_tag(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

Querying the number of global private bandwidth tags in an account

```
package main  
  
import (  
    "fmt"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"  
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/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")  
  
    auth := global.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        Build()  
  
    client := cc.NewCcClient(  
        cc.CcClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).  
            Build())  
  
    request := &model.CountGcbResourceByTagRequest{  
        var listMatchesbody = []model.TmsMatch{  
            {  
                Key: "resource_name",  
                Value: "resource1",  
            },  
        }  
        var listValuesNotTagsAny = []string{  
            "value1",  
            "value2",  
        }  
        var listNotTagsAnybody = []model.QueryTag{  
            {  
                Key: "key1",  
                Values: listValuesNotTagsAny,  
            },  
        }  
        var listValuesNotTags = []string{  
            "value1",  
            "value2",  
        }  
        var listNotTagsbody = []model.QueryTag{  
            {
```



```

        Key: "key1",
        Values: listValuesNotTags,
    },
}
var listValuesTagsAny = []string{
    "value1",
    "value2",
}
var listTagsAnybody = []model.QueryTag{
    {
        Key: "key1",
        Values: listValuesTagsAny,
    },
}
var listValuesTags = []string{
    "value1",
    "value2",
}
var listTagsbody = []model.QueryTag{
    {
        Key: "key1",
        Values: listValuesTags,
    },
}
request.Body = &model.QueryResourceByTagRequestBody{
    Matches: &listMatchesbody,
    NotTagsAny: &listNotTagsAnybody,
    NotTags: &listNotTagsbody,
    TagsAny: &listTagsAnybody,
    Tags: &listTagsbody,
}
response, err := client.CountGcbResourceByTag(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The number of global private bandwidth tags in an account has been queried.

Error Codes

See [Error Codes](#).

6.2.7 Querying the Global Private Bandwidth List in an Account

Function

This API is used to query the global private bandwidth list in an account.

Calling Method

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

URI

POST /v3/gcb/resource-instances/filter

Table 6-50 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Records to be queried. Minimum: 1 Maximum: 1000.0
offset	No	Integer	Index position. Minimum: 0 Maximum: 999

Request Parameters

Table 6-51 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. Minimum: 0 Maximum: 102400

Table 6-52 Request body parameters

Parameter	Mandatory	Type	Description
request_id	No	String	Request ID. Minimum: 0 Maximum: 36

Parameter	Mandatory	Type	Description
without_any_tag	No	Boolean	If this parameter is set to true , all resources without tags are queried. In this case, the tags , tags_any , not_tags , and not_tags_any fields are not required.
tags	No	Array of QueryTag objects	The instances to be queried contain tags listed in tags . Each instance to be queried contains a maximum of 20 keys. Each tag key has a maximum of 10 tag values. The tag value corresponding to each tag key can be an empty array but the structure cannot be missing. Each tag key must be unique, and each tag value for a tag key must be unique. The response returns instances containing all tags in this list. Keys in this list are in the AND relationship and values in each key-value structure are in the OR relationship. If no tag filtering condition is specified, full data is returned. Array Length: 0 - 50

Parameter	Mandatory	Type	Description
tags_any	No	Array of QueryTag objects	<p>The instances to be queried contain any tag listed in tags_any. Each instance to be queried contains a maximum of 20 keys. Each tag key has a maximum of 10 tag values. The tag value corresponding to each tag key can be an empty array but the structure cannot be missing. Each tag key must be unique, and each tag value for a tag key must be unique. The response returns instances containing any tag in this list. Keys in this list are in the OR relationship and values in each key-value structure are also in the OR relationship. If no tag filtering criteria is specified, full data is returned.</p> <p>Array Length: 0 - 50</p>
not_tags	No	Array of QueryTag objects	<p>The instances to be queried do not contain any tag listed in not_tags. Each instance to be queried contains a maximum of 20 keys. Each tag key has a maximum of 10 tag values. The tag value corresponding to each tag key can be an empty array but the structure cannot be missing. Each tag key must be unique, and each tag value for a tag key must be unique. The response returns resources containing no tags in this list. Keys in this list are in the AND relationship and values in each key-value structure are in the OR relationship. If no tag filtering criteria is specified, full data is returned.</p> <p>Array Length: 0 - 50</p>

Parameter	Mandatory	Type	Description
not_tags_any	No	Array of QueryTag objects	The instances to be queried do not contain all tags listed in not_tags_any . Each instance to be queried contains a maximum of 20 keys. Each tag key has a maximum of 10 tag values. The tag value corresponding to each tag key can be an empty array but the structure cannot be missing. Each tag key must be unique, and each tag value for a tag key must be unique. The response returns resources containing no tag in this list. Keys in this list are in the OR relationship and values in each key-value structure are also in the OR relationship. If no tag filtering criteria is specified, full data is returned. Array Length: 0 - 50
matches	No	Array of TmsMatch objects	Whether to match the tags: The tag key is set to resource_name . If there is a tag value, fuzzy matching is used. If the tag value is an empty string, exact matching is used. Array Length: 0 - 50

Table 6-53 QueryTag

Parameter	Mandatory	Type	Description
key	Yes	String	Key. Minimum: 0 Maximum: 128
values	Yes	Array of strings	Tag value list. Minimum: 0 Maximum: 255 Array Length: 1 - 10

Table 6-54 TmsMatch

Parameter	Mandatory	Type	Description
key	Yes	String	Key. Currently, only resource_name is supported. Other key values will be available later. Minimum: 1 Maximum: 128
value	Yes	String	Tag value. Minimum: 0 Maximum: 255

Response Parameters

Status code: 200

Table 6-55 Response body parameters

Parameter	Type	Description
resources	Array of TmsResource objects	Array Length: 0 - 2000
total_count	Integer	Total number of records. Minimum: 0 Maximum: 2000.0
request_id	String	Request ID Minimum: 0 Maximum: 36

Table 6-56 TmsResource

Parameter	Type	Description
resource_id	String	Resource ID. Minimum: 1 Maximum: 36
tags	Array of Tag objects	Tag list. If no tag is matched, an empty array is returned. Array Length: 0 - 20

Parameter	Type	Description
resource_name	String	Resource name. This parameter is an empty string by default if there is no resource name. Minimum: 1 Maximum: 64

Table 6-57 Tag

Parameter	Type	Description
key	String	Tag key. Minimum: 1 Maximum: 128
value	String	Tag value. Minimum: 0 Maximum: 255

Example Requests

Querying the global private bandwidth list in an account

POST https://{cc_endpoint}/v3/gcb/resource-instances/filter

```
{
  "matches": [ {
    "key": "resource_name",
    "value": "resource1"
  } ],
  "not_tags": [ {
    "key": "key1",
    "values": [ "value1", "value2" ]
  } ],
  "tags": [ {
    "key": "key1",
    "values": [ "value1", "value2" ]
  } ],
  "tags_any": [ {
    "key": "key1",
    "values": [ "value1", "value2" ]
  } ],
  "not_tags_any": [ {
    "key": "key1",
    "values": [ "value1", "value2" ]
  } ]
}
```

Example Responses

Status code: 200

The global private bandwidth list in an account has been queried.

```
{
  "resources": [ {
```

```
"resource_id" : "cb9d7ead-834a-4275-93e1-217f79df9dc1",
"resource_name" : "test",
"tags" : [ {
  "key" : "key1",
  "value" : "value1"
} ]
},
"request_id" : "e3371202-7e85-4c16-bb4b-4e3c092734f7",
"total_count" : 1
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Querying the global private bandwidth list in an account

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v2.region.CcRegion;
import com.huaweicloud.sdk.cc.v2.*;
import com.huaweicloud.sdk.cc.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListGcbResourceByTagSolution {

    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");

        ICredential auth = new GlobalCredentials()
            .withAk(ak)
            .withSk(sk);

        CcClient client = CcClient.newBuilder()
            .withCredential(auth)
            .withRegion(CcRegion.valueOf("<YOUR REGION>"))
            .build();
        ListGcbResourceByTagRequest request = new ListGcbResourceByTagRequest();
        request.withLimit(<limit>);
        request.withOffset(<offset>);
        QueryResourceByTagRequestBody body = new QueryResourceByTagRequestBody();
        List<TmsMatch> listbodyMatches = new ArrayList<>();
        listbodyMatches.add(
            new TmsMatch()
                .withKey("resource_name")
                .withValue("resource1")
        );
        List<String> listNotTagsAnyValues = new ArrayList<>();
        listNotTagsAnyValues.add("value1");
        listNotTagsAnyValues.add("value2");
        List<QueryTag> listbodyNotTagsAny = new ArrayList<>();
        listbodyNotTagsAny.add(
```



```
        new QueryTag()
            .withKey("key1")
            .withValues(listNotTagsAnyValues)
    );
    List<String> listNotTagsValues = new ArrayList<>();
    listNotTagsValues.add("value1");
    listNotTagsValues.add("value2");
    List<QueryTag> listbodyNotTags = new ArrayList<>();
    listbodyNotTags.add(
        new QueryTag()
            .withKey("key1")
            .withValues(listNotTagsValues)
    );
    List<String> listTagsAnyValues = new ArrayList<>();
    listTagsAnyValues.add("value1");
    listTagsAnyValues.add("value2");
    List<QueryTag> listbodyTagsAny = new ArrayList<>();
    listbodyTagsAny.add(
        new QueryTag()
            .withKey("key1")
            .withValues(listTagsAnyValues)
    );
    List<String> listTagsValues = new ArrayList<>();
    listTagsValues.add("value1");
    listTagsValues.add("value2");
    List<QueryTag> listbodyTags = new ArrayList<>();
    listbodyTags.add(
        new QueryTag()
            .withKey("key1")
            .withValues(listTagsValues)
    );
    body.withMatches(listbodyMatches);
    body.withNotTagsAny(listbodyNotTagsAny);
    body.withNotTags(listbodyNotTags);
    body.withTagsAny(listbodyTagsAny);
    body.withTags(listbodyTags);
    request.withBody(body);
    try {
        ListGcbResourceByTagResponse response = client.listGcbResourceByTag(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

Querying the global private bandwidth list in an account

```
# coding: utf-8
```

```
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.v2.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcc.v2 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 = __import__('os').getenv("CLOUD_SDK_AK")
sk = __import__('os').getenv("CLOUD_SDK_SK")

credentials = GlobalCredentials(ak, sk) \

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

try:
    request = ListGcbResourceByTagRequest()
    request.limit = <limit>
    request.offset = <offset>
    listMatchesbody = [
        TmsMatch(
            key="resource_name",
            value="resource1"
        )
    ]
    listValuesNotTagsAny = [
        "value1",
        "value2"
    ]
    listNotTagsAnybody = [
        QueryTag(
            key="key1",
            values=listValuesNotTagsAny
        )
    ]
    listValuesNotTags = [
        "value1",
        "value2"
    ]
    listNotTagsbody = [
        QueryTag(
            key="key1",
            values=listValuesNotTags
        )
    ]
    listValuesTagsAny = [
        "value1",
        "value2"
    ]
    listTagsAnybody = [
        QueryTag(
            key="key1",
            values=listValuesTagsAny
        )
    ]
    listValuesTags = [
        "value1",
        "value2"
    ]
    listTagsbody = [
        QueryTag(
            key="key1",
            values=listValuesTags
        )
    ]
    request.body = QueryResourceByTagRequestBody(
        matches=listMatchesbody,
        not_tags_any=listNotTagsAnybody,
        not_tags=listNotTagsbody,
        tags_any=listTagsAnybody,
        tags=listTagsbody
    )
)
```

```
response = client.list_gcb_resource_by_tag(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

Querying the global private bandwidth list in an account

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListGcbResourceByTagRequest{}
    limitRequest:= int32(<limit>)
    request.Limit = &limitRequest
    offsetRequest:= int32(<offset>)
    request.Offset = &offsetRequest
    var listMatchesbody = []model.TmsMatch{
        {
            Key: "resource_name",
            Value: "resource1",
        },
    }
    var listValuesNotTagsAny = []string{
        "value1",
        "value2",
    }
    var listNotTagsAnybody = []model.QueryTag{
        {
            Key: "key1",
            Values: listValuesNotTagsAny,
        },
    }
    var listValuesNotTags = []string{
        "value1",
        "value2",
    }
    var listNotTagsbody = []model.QueryTag{
        {
```

```

        Key: "key1",
        Values: listValuesNotTags,
    },
}
var listValuesTagsAny = []string{
    "value1",
    "value2",
}
var listTagsAnybody = []model.QueryTag{
    {
        Key: "key1",
        Values: listValuesTagsAny,
    },
}
var listValuesTags = []string{
    "value1",
    "value2",
}
var listTagsbody = []model.QueryTag{
    {
        Key: "key1",
        Values: listValuesTags,
    },
}
request.Body = &model.QueryResourceByTagRequestBody{
    Matches: &listMatchesbody,
    NotTagsAny: &listNotTagsAnybody,
    NotTags: &listNotTagsbody,
    TagsAny: &listTagsAnybody,
    Tags: &listTagsbody,
}
response, err := client.ListGcbResourceByTag(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The global private bandwidth list in an account has been queried.

Error Codes

See [Error Codes](#).

6.2.8 Querying All Global Private Bandwidth Tags in an Account

Function

This API is used to query all global private bandwidth tags in an account.

Calling Method

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

URI

GET /v3/gcb/tags

Request Parameters

Table 6-58 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. Minimum: 0 Maximum: 102400

Response Parameters

Status code: 200

Table 6-59 Response body parameters

Parameter	Type	Description
tags	Array of TmsTagValues objects	Tag list. Array Length: 0 - 20
total_count	Integer	Total number of records. Minimum: 0 Maximum: 2000.0
request_id	String	Request ID. Minimum: 0 Maximum: 36

Table 6-60 TmsTagValues

Parameter	Type	Description
key	String	Key. Minimum: 0 Maximum: 128
values	Array of strings	Tag value list. Minimum: 0 Maximum: 255 Array Length: 1 - 10

Example Requests

Querying all global private bandwidth tags in an account

```
GET https://{cc_endpoint}/v3/gcb/tags
```

Example Responses

Status code: 200

All global private bandwidth tags in an account have been queried.

```
{
  "tags" : [ {
    "key" : "key1",
    "values" : [ "value1", "value2" ]
  } ],
  "request_id" : "e3371202-7e85-4c16-bb4b-4e3c092734f7",
  "total_count" : 1
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.cc.v2.region.CcRegion;
import com.huaweicloud.sdk.cc.v2.*;
import com.huaweicloud.sdk.cc.v2.model.*;

public class ListGcbTenantTagsSolution {

    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");

ICredential auth = new GlobalCredentials()
    .withAk(ak)
    .withSk(sk);

CcClient client = CcClient.newBuilder()
    .withCredential(auth)
    .withRegion(CcRegion.valueOf("<YOUR REGION>"))
    .build();
ListGcbTenantTagsRequest request = new ListGcbTenantTagsRequest();
try {
    ListGcbTenantTagsResponse response = client.listGcbTenantTags(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

from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdccc.v2.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdccc.v2 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 = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = GlobalCredentials(ak, sk) \

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

    try:
        request = ListGcbTenantTagsRequest()
        response = client.list_gcb_tenant_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/global"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cc/v2/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")

    auth := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cc.NewCcClient(
        cc.CcClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	All global private bandwidth tags in an account have been queried.

Error Codes

See [Error Codes](#).

A Change History

Released On	Description
2024-03-06	This issue is the third official release. Added "Global Private Bandwidth."
2022-10-23	This issue is the second official release. Added "Historical APIs."
2022-05-30	This issue is the first official release.