

Cloud Connect

API Reference

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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](#).

You need to select an endpoint based on your service requirements.

1.4 Constraints

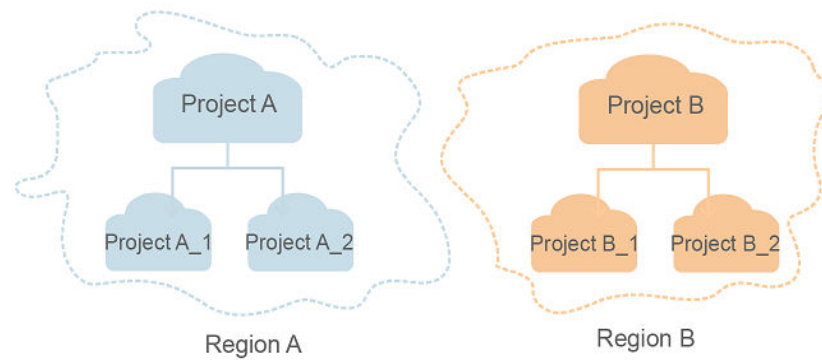
- The number of Cloud Connect resources that you can create is determined by your quota. To view or increase the quota, see [Notes and Constraints](#).

- 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.

Cloud Connect APIs allow you to use all the functions.

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

[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, and deleting a cloud connection, and listing all cloud connections
Network instance APIs	APIs for loading, querying, updating, and removing a network instance, and listing all network instances
Cloud connection route APIs	APIs for querying a route and listing all routes
Central network APIs	APIs for creating, querying, updating, and deleting a central network, listing the central networks, creating, applying, and deleting a policy, and querying policy changes
Central network attachment APIs	APIs for creating, querying, updating, and removing an attachment, and listing all attachments
Central network connection APIs	APIs for updating a connection and listing the connections

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 [creating an IAM User](#) 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

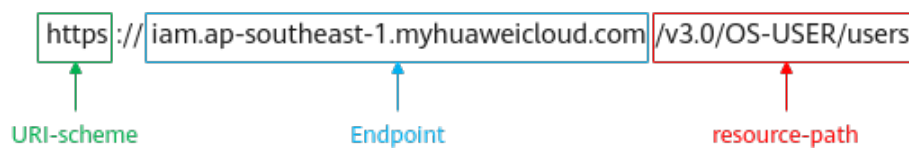
Parameter	Description
URI-scheme	Protocol used to transmit requests. All APIs use HTTPS.
Endpoint	Domain name or IP address of the server bearing the REST service. The endpoint varies between services in different regions. It can be obtained from Regions and Endpoints . For example, the endpoint of IAM 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.

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

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

Figure 3-1 Example URI



NOTE

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

Request Methods

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

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

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

Request Header

You can also add additional 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 following shows an example request of the API for [creating an IAM user](#) when AK/SK authentication is used:

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

(Optional) Request Body

This part is optional. A request body is generally sent in a structured format (for example, JSON or XML), which is specified by **Content-Type** in the request header. It is used to transfer content other than the request header. If the request body contains full-width characters, these characters must be coded in UTF-8.

The request body varies depending on APIs. Certain APIs do not require the request body, such as the APIs requested using the GET and DELETE methods.

The following shows an example request (a request body included) of the API for [creating an IAM user](#). You can learn about request parameters and related

description from this example. The bold parameters need to be replaced for a real request.

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

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

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

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

- 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: Requests are authenticated using tokens.

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.

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": "xxxxxxxx" // 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/v3.0/OS-USER/users
Content-Type: application/json
X-Auth-Token: ABCDEFJ....
```

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 **create an IAM user**, 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 **create an IAM user**. 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 creating an IAM user

```
"X-Frame-Options": "SAMEORIGIN",
"X-IAM-ETag-id": "2562365939-d8f6f12921974cb097338ac11fceac8a",
"Transfer-Encoding": "chunked",
"Strict-Transport-Security": "max-age=31536000; includeSubdomains;",
"Server": "api-gateway",
"X-Request-Id": "af2953f2bcc67a42325a69a19e6c32a2",
"X-Content-Type-Options": "nosniff",
"Connection": "keep-alive",
"X-Download-Options": "noopen",
"X-XSS-Protection": "1; mode=block;",
"X-IAM-Trace-Id": "token_██████████_null_af2953f2bcc67a42325a69a19e6c32a2",
"Date": "Tue, 21 May 2024 09:03:40 GMT",
"Content-Type": "application/json; charset=utf8"
```

(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 **create an IAM user**.

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

```
}  
}
```

If an error occurs during API calling, 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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-1 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-2 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

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	Instance name.
description	No	String	Resource description. Angle brackets (<>) are not allowed.
enterprise_project_id	No	String	ID of the enterprise project that the resource belongs to.

Response Parameters

Status code: 201

Table 4-5 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
cloud_connection	CloudConnection object	Cloud connection.

Table 4-6 CloudConnection

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
domain_id	String	ID of the account that the instance belongs to.
enterprise_project_id	String	ID of the enterprise project that the resource 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.
tags	Array of Tag objects	Resource tags.
status	String	Cloud connection status. ACTIVE: The cloud connection is available.
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.
network_instance_number	Integer	Number of the network instances loaded to the cloud connection.
bandwidth_package_number	Integer	Number of the bandwidth packages bound to the cloud connection.
inter_region_bandwidth_number	Integer	Number of the inter-region bandwidths configured for the cloud connection.

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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-8 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-9 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 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.
id	No	Array of arrays	Resource ID. Multiple IDs can be queried.
name	No	Array of strings	Resource name. Multiple names can be queried.
description	No	Array of strings	Description. Multiple descriptions can be queried.
enterprise_project_id	No	Array of strings	Enterprise project IDs.
status	No	Array of strings	Cloud connection status. ACTIVE : Cloud connections are available.
type	No	Array of strings	Type (application scenario) used to query cloud connections.
used_scene	No	Array of strings	Searching for cloud connections by application scenario

Request Parameters

Table 4-10 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-11 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
page_info	PageInfo object	Pagination query information.
cloud_connections	Array of CloudConnection objects	Cloud connection list.

Table 4-12 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Table 4-13 CloudConnection

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
domain_id	String	ID of the account that the instance belongs to.
enterprise_project_id	String	ID of the enterprise project that the resource 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
tags	Array of Tag objects	Resource tags.
status	String	Cloud connection status. ACTIVE: The cloud connection is available.
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.
network_instance_number	Integer	Number of the network instances loaded to the cloud connection.
bandwidth_package_number	Integer	Number of the bandwidth packages bound to the cloud connection.
inter_region_bandwidth_number	Integer	Number of the inter-region bandwidths configured for the cloud connection.

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.*;

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();
        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();
        }
    }
}
```

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

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import 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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        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{}
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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-15 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Parameter	Mandatory	Type	Description
id	Yes	String	Instance ID.

Request Parameters

Table 4-16 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-17 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
cloud_connection	CloudConnection object	Cloud connection.

Table 4-18 CloudConnection

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
domain_id	String	ID of the account that the instance belongs to.
enterprise_project_id	String	ID of the enterprise project that the resource 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
tags	Array of Tag objects	Resource tags.
status	String	Cloud connection status. ACTIVE: The cloud connection is available.
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.
network_instance_number	Integer	Number of the network instances loaded to the cloud connection.
bandwidth_package_number	Integer	Number of the bandwidth packages bound to the cloud connection.
inter_region_bandwidth_number	Integer	Number of the inter-region bandwidths configured for the cloud connection.

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();
        request.withId("{id}");
        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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.id = "{id}"
        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{}
request.Id = "{id}"
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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-20 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
id	Yes	String	Instance ID.

Request Parameters

Table 4-21 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

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	Instance name.
description	No	String	Resource description. Angle brackets (<>) are not allowed.

Response Parameters

Status code: 200

Table 4-24 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
cloud_connection	CloudConnection object	Cloud connection.

Table 4-25 CloudConnection

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

Parameter	Type	Description
description	String	Resource description. Angle brackets (<>) are not allowed.
domain_id	String	ID of the account that the instance belongs to.
enterprise_project_id	String	ID of the enterprise project that the resource 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.
tags	Array of Tag objects	Resource tags.
status	String	Cloud connection status. ACTIVE: The cloud connection is available.
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.
network_instance_number	Integer	Number of the network instances loaded to the cloud connection.
bandwidth_package_number	Integer	Number of the bandwidth packages bound to the cloud connection.
inter_region_bandwidth_number	Integer	Number of the inter-region bandwidths configured for the cloud connection.

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 (_).

Parameter	Type	Description
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();
        request.withId("{id}");
        UpdateCloudConnectionRequestBody body = new UpdateCloudConnectionRequestBody();
        UpdateCloudConnection cloudConnectionbody = new UpdateCloudConnection();
        cloudConnectionbody.withName("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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
    request.id = "{id}"
    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{
        request.Id = "{id}"
        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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-27 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
id	Yes	String	Instance ID.

Request Parameters

Table 4-28 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

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();
```

```
request.withId("{id}");
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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.id = "{id}"
        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{}
request.Id = "{id}"
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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-29 Path Parameters

Parameter	Mandatory	Type	Description
id	Yes	String	Instance ID.
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-30 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Table 4-31 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of Tag objects	Tags.

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	String	-

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();
request.withId("{id}");
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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.id = "{id}"
        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{}
    request.Id = "{id}"
    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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

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.
id	Yes	String	Instance ID.

Request Parameters

Table 4-35 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Table 4-36 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of Tag objects	Tags.

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	String	-

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();
        request.withId("{id}");
        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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.id = "{id}"
        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{}
request.Id = "{id}"
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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-39 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-40 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-41 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
tags	Array of MultivaluedTag objects	All tags of the cloud connection.

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.

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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-43 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-44 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Table 4-45 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of MultivaluedTag objects	Tags.

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.

Response Parameters

Status code: 200

Table 4-47 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
page_info	PageInfo object	Pagination query information.

Parameter	Type	Description
cloud_connections	Array of CloudConnection objects	Cloud connection list.

Table 4-48 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Table 4-49 CloudConnection

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
domain_id	String	ID of the account that the instance belongs to.
enterprise_project_id	String	ID of the enterprise project that the resource 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.
tags	Array of Tag objects	Resource tags.
status	String	Cloud connection status. ACTIVE: The cloud connection is available.
admin_state_up	Boolean	Administrative status of the cloud connection.

Parameter	Type	Description
used_scene	String	Cloud Connect application scenarios. VPC: Cloud Connect is used to connect VPCs.
network_instance_number	Integer	Number of the network instances loaded to the cloud connection.
bandwidth_package_number	Integer	Number of the bandwidth packages bound to the cloud connection.
inter_region_bandwidth_number	Integer	Number of the inter-region bandwidths configured for the cloud connection.

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-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" : [ {
  "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.cc.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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-51 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-52 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

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	Instance name.
description	No	String	Resource description. Angle brackets (<>) are not allowed.
instance_id	Yes	String	ID of the network instance (VPC or virtual gateway).
instance_domain_id	No	String	ID of the account that the network instance (VPC or virtual gateway) belongs to.
project_id	Yes	String	Project ID.
region_id	Yes	String	Region ID.
cloud_connection_id	Yes	String	Cloud connection 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
cidrs	Yes	Array of strings	CIDR block routes advertised by the network instance.

Response Parameters

Status code: 201

Table 4-55 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
network_instance	NetworkInstance object	Network instance.

Table 4-56 NetworkInstance

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
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	Cloud connection ID.
instance_id	String	ID of the network instance (VPC or virtual gateway).
instance_domain_id	String	ID of the account that the network instance (VPC or virtual gateway) 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.
type	String	Type of the network instance. <ul style="list-style-type: none"> ● vpc: a VPC ● vgw: a virtual gateway
cidrs	Array of strings	CIDR block routes advertised by the network instance.

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" : "region-abc",
    "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" : "c8fe3d71352e273915bfd74ce58368a",
  "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" : "region-abc",
    "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("region-abc")
    .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

import os
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 = os.getenv("CLOUD_SDK_AK")
    sk = 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="region-abc",
        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: "region-abc",
        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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-57 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-58 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 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.
id	No	Array of arrays	Resource ID. Multiple IDs can be queried.
name	No	Array of strings	Resource name. Multiple names can be queried.
description	No	Array of strings	Description. Multiple descriptions can be queried.
cloud_connection_id	No	Array of arrays	Cloud connection IDs.
status	No	Array of strings	Network instance status. ACTIVE : Network instances are available.
type	No	Array of strings	Type used to query network instances.
instance_id	No	Array of strings	Network instance ID used for query.
region_id	No	Array of strings	Region where network instances are deployed.

Request Parameters

Table 4-59 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-60 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
page_info	PageInfo object	Pagination query information.
network_instances	Array of NetworkInstance objects	Network instance list.

Table 4-61 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Table 4-62 NetworkInstance

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
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	Cloud connection ID.
instance_id	String	ID of the network instance (VPC or virtual gateway).
instance_domain_id	String	ID of the account that the network instance (VPC or virtual gateway) 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.
type	String	Type of the network instance. <ul style="list-style-type: none"> ● vpc: a VPC ● vgw: a virtual gateway
cidrs	Array of strings	CIDR block routes advertised by the network instance.

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" : "b961d5fcd6b993b5b750f1b96e484e0",
  "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" : "region-abc",
"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.*;

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();
        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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        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{}
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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-63 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
id	Yes	String	Instance ID.

Request Parameters

Table 4-64 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-65 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
network_instance	NetworkInstance object	Network instance.

Table 4-66 NetworkInstance

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
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	Cloud connection ID.
instance_id	String	ID of the network instance (VPC or virtual gateway).
instance_domain_id	String	ID of the account that the network instance (VPC or virtual gateway) belongs to.

Parameter	Type	Description
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.
type	String	Type of the network instance. <ul style="list-style-type: none"> ● vpc: a VPC ● vgw: a virtual gateway
cidrs	Array of strings	CIDR block routes advertised by the network instance.

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" : "b961d5fcd46b993b5b750f1b96e484e0",
  "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" : "region-abc",
    "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();
        request.withId("{id}");
        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

import os
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 = os.environ["CLOUD_SDK_AK"]
```



```
sk = os.environ["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()
    request.id = "{id}"
    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{}
    request.Id = "{id}"
    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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-67 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
id	Yes	String	Instance ID.

Request Parameters

Table 4-68 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

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	Instance name.
description	No	String	Resource description. Angle brackets (<>) are not allowed.
cidrs	No	Array of strings	CIDR block routes advertised by the network instance.

Response Parameters

Status code: 200

Table 4-71 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
network_instance	NetworkInstance object	Network instance.

Table 4-72 NetworkInstance

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
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.

Parameter	Type	Description
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	Cloud connection ID.
instance_id	String	ID of the network instance (VPC or virtual gateway).
instance_domain_id	String	ID of the account that the network instance (VPC or virtual gateway) 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.
type	String	Type of the network instance. <ul style="list-style-type: none"> ● vpc: a VPC ● vgw: a virtual gateway
cidrs	Array of strings	CIDR block routes advertised by the network instance.

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" : "region-abc",
"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();
        request.withId("{id}");
        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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.id = "{id}"
        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{}
    request.Id = "{id}"
    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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-73 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
id	Yes	String	Instance ID.

Request Parameters

Table 4-74 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

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();
        request.withId("{id}");
        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

import os
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 = os.getenv("CLOUD_SDK_AK")
    sk = 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()
    request.id = "{id}"
    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{}
    request.Id = "{id}"
    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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-75 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-76 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

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	Instance name.
description	No	String	Resource description. Angle brackets (<>) are not allowed.
enterprise_project_id	No	String	ID of the enterprise project that the resource belongs to.
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
charge_mode	Yes	String	Bandwidth package billing option. bandwidth : The bandwidth is billed by fixed bandwidth.

Parameter	Mandatory	Type	Description
billing_mode	Yes	Integer	<p>Billing mode of the bandwidth package on the Chinese Mainland website or the International website.</p> <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.
resource_id	No	String	ID of the resource that the bandwidth package is bound to.
resource_type	No	String	<p>Type of the resource that the bandwidth package is bound to.</p> <p>cloud_connection: The bandwidth package is bound to a cloud connection.</p>

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.cmtola: Chinese mainland-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtola: Chinese mainland-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.cmtola: Chinese mainland-Eastern 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.elatola: Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.elatola: Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.elatola: Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.elatola: Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.wlatola: Western Latin America-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.wlatola: Western Latin America-Eastern Latin America on both the Chinese Mainland website and International website ● bandwidth.wlatola: Western Latin America-Eastern 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

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

Response Parameters

Status code: 201

Table 4-79 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
bandwidth_package	BandwidthPackage object	Bandwidth package.

Table 4-80 BandwidthPackage

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
domain_id	String	ID of the account that the instance belongs to.
enterprise_project_id	String	ID of the enterprise project that the resource belongs to.
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.

Parameter	Type	Description
resource_type	String	Type of the resource that the bandwidth package is bound to. cloud_connection : a cloud connection
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

Parameter	Type	Description
		<p>on both the Chinese Mainland website and International website</p> <ul style="list-style-type: none"> ● 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 ● 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
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	Resource tags.

Parameter	Type	Description
status	String	Status of the bandwidth package. ACTIVE: The bandwidth package is available.
admin_state_up	Boolean	Administrative status of the bandwidth package.
order_id	String	Order ID of the bandwidth package.
product_id	String	Product ID of the bandwidth package.
charge_mode	String	Bandwidth billing option. The bandwidth is billed by fixed bandwidth.
bandwidth	Integer	Bandwidth range specified for the bandwidth package.
interflow_mode	String	Bandwidth package applicability. <ul style="list-style-type: none"> • Area: geographic regions • Region: cloud regions

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

import os
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 = os.getenv("CLOUD_SDK_AK")
    sk = 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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-82 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-83 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 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.
id	No	Array of arrays	Resource ID. Multiple IDs can be queried.
name	No	Array of strings	Resource name. Multiple names can be queried.
enterprise_project_id	No	Array of strings	Enterprise project IDs.
cloud_connection_id	No	Array of arrays	Cloud connection IDs.
status	No	Array of strings	Bandwidth package status. ACTIVE : Bandwidth packages are available.
billing_mode	No	Array of strings	Billing mode used to query bandwidth packages.
resource_id	No	Array of strings	Resource ID used to query bandwidth packages.

Request Parameters

Table 4-84 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-85 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
page_info	PageInfo object	Pagination query information.
bandwidth_packages	Array of BandwidthPackage objects	Bandwidth package list.

Table 4-86 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Table 4-87 BandwidthPackage

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
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 resource belongs to.
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.
resource_type	String	Type of the resource that the bandwidth package is bound to. cloud_connection : a cloud connection
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

Parameter	Type	Description
		<p>on both the Chinese Mainland website and International website</p> <ul style="list-style-type: none"> ● 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 ● 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
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	Resource tags.

Parameter	Type	Description
status	String	Status of the bandwidth package. ACTIVE: The bandwidth package is available.
admin_state_up	Boolean	Administrative status of the bandwidth package.
order_id	String	Order ID of the bandwidth package.
product_id	String	Product ID of the bandwidth package.
charge_mode	String	Bandwidth billing option. The bandwidth is billed by fixed bandwidth.
bandwidth	Integer	Bandwidth range specified for the bandwidth package.
interflow_mode	String	Bandwidth package applicability. <ul style="list-style-type: none"> • Area: geographic regions • Region: cloud regions

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.*;

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();
```

```
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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        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{}
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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-89 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
id	Yes	String	Instance ID.

Request Parameters

Table 4-90 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-91 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
bandwidth_package	BandwidthPackage object	Bandwidth package.

Table 4-92 BandwidthPackage

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
domain_id	String	ID of the account that the instance belongs to.
enterprise_project_id	String	ID of the enterprise project that the resource belongs to.
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.
resource_type	String	Type of the resource that the bandwidth package is bound to. cloud_connection : a cloud connection
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

Parameter	Type	Description
		<p>on both the Chinese Mainland website and International website</p> <ul style="list-style-type: none"> ● 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 ● 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
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	Resource tags.

Parameter	Type	Description
status	String	Status of the bandwidth package. ACTIVE: The bandwidth package is available.
admin_state_up	Boolean	Administrative status of the bandwidth package.
order_id	String	Order ID of the bandwidth package.
product_id	String	Product ID of the bandwidth package.
charge_mode	String	Bandwidth billing option. The bandwidth is billed by fixed bandwidth.
bandwidth	Integer	Bandwidth range specified for the bandwidth package.
interflow_mode	String	Bandwidth package applicability. <ul style="list-style-type: none"> • Area: geographic regions • Region: cloud regions

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();
        request.withId("{id}");
        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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.id = "{id}"
        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{}
request.Id = "{id}"
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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-94 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
id	Yes	String	Instance ID.

Request Parameters

Table 4-95 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

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	Instance name.
description	No	String	Resource description. Angle brackets (<>) are not allowed.
bandwidth	No	Integer	Bandwidth in the bandwidth package.
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	Request ID.
bandwidth_package	BandwidthPackage object	Bandwidth package.

Table 4-99 BandwidthPackage

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
domain_id	String	ID of the account that the instance belongs to.
enterprise_project_id	String	ID of the enterprise project that the resource belongs to.
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.
resource_type	String	Type of the resource that the bandwidth package is bound to. cloud_connection : a cloud connection

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

Parameter	Type	Description
		<p>on both the Chinese Mainland website and International website</p> <ul style="list-style-type: none"> ● 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 ● 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
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	Resource tags.

Parameter	Type	Description
status	String	Status of the bandwidth package. ACTIVE: The bandwidth package is available.
admin_state_up	Boolean	Administrative status of the bandwidth package.
order_id	String	Order ID of the bandwidth package.
product_id	String	Product ID of the bandwidth package.
charge_mode	String	Bandwidth billing option. The bandwidth is billed by fixed bandwidth.
bandwidth	Integer	Bandwidth range specified for the bandwidth package.
interflow_mode	String	Bandwidth package applicability. <ul style="list-style-type: none"> • Area: geographic regions • Region: cloud regions

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_bwp_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();
request.withId("{id}");
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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = UpdateBandwidthPackageRequest()
        request.id = "{id}"
        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{}
    request.Id = "{id}"
    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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-101 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
id	Yes	String	Instance ID.

Request Parameters

Table 4-102 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

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();
        request.withId("{id}");
        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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.id = "{id}"
        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{}
request.Id = "{id}"
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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-103 Path Parameters

Parameter	Mandatory	Type	Description
id	Yes	String	Instance ID.
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-104 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Table 4-105 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of Tag objects	Tags.

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	String	-

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();
        request.withId("{id}");
        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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.id = "{id}"
        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{}
    request.Id = "{id}"
    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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

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.
id	Yes	String	Instance ID.

Request Parameters

Table 4-109 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Table 4-110 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of Tag objects	Tags.

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 (_).

Parameter	Mandatory	Type	Description
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	String	-

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();
        request.withId("{id}");
        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

import os
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 = os.environ["CLOUD_SDK_AK"]
sk = os.environ["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()
    request.id = "{id}"
    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{}
    request.Id = "{id}"
    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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-113 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-114 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-115 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
tags	Array of MultivaluedTag objects	All tags of a bandwidth package.

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.

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  
  
import os  
from huaweicloudsdkcore.auth.credentials import GlobalCredentials  
from huaweicloudsdccc.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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-117 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-118 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Table 4-119 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of MultivaluedTag objects	Tags.

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.

Response Parameters

Status code: 200

Table 4-121 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
page_info	PageInfo object	Pagination query information.
bandwidth_packages	Array of BandwidthPackage objects	Bandwidth package list.

Table 4-122 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Table 4-123 BandwidthPackage

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
domain_id	String	ID of the account that the instance belongs to.
enterprise_project_id	String	ID of the enterprise project that the resource belongs to.
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.
resource_type	String	Type of the resource that the bandwidth package is bound to. cloud_connection : a cloud connection
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

Parameter	Type	Description
		<p>on both the Chinese Mainland website and International website</p> <ul style="list-style-type: none"> ● 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 ● 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
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	Resource tags.

Parameter	Type	Description
status	String	Status of the bandwidth package. ACTIVE: The bandwidth package is available.
admin_state_up	Boolean	Administrative status of the bandwidth package.
order_id	String	Order ID of the bandwidth package.
product_id	String	Product ID of the bandwidth package.
charge_mode	String	Bandwidth billing option. The bandwidth is billed by fixed bandwidth.
bandwidth	Integer	Bandwidth range specified for the bandwidth package.
interflow_mode	String	Bandwidth package applicability. <ul style="list-style-type: none"> • Area: geographic regions • Region: cloud regions

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

import os
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 = os.getenv("CLOUD_SDK_AK")
    sk = 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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

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.
id	Yes	String	Instance ID.

Request Parameters

Table 4-126 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

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.
resource_type	Yes	String	Type of the resource that the bandwidth package is bound to. cloud_connection : a cloud connection

Response Parameters

Status code: 201

Table 4-129 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
bandwidth_package	BandwidthPackage object	Bandwidth package.

Table 4-130 BandwidthPackage

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
domain_id	String	ID of the account that the instance belongs to.
enterprise_project_id	String	ID of the enterprise project that the resource belongs to.
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.
resource_type	String	Type of the resource that the bandwidth package is bound to. cloud_connection : a cloud connection
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

Parameter	Type	Description
		<p>on both the Chinese Mainland website and International website</p> <ul style="list-style-type: none"> ● 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 ● 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
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	Resource tags.

Parameter	Type	Description
status	String	Status of the bandwidth package. ACTIVE: The bandwidth package is available.
admin_state_up	Boolean	Administrative status of the bandwidth package.
order_id	String	Order ID of the bandwidth package.
product_id	String	Product ID of the bandwidth package.
charge_mode	String	Bandwidth billing option. The bandwidth is billed by fixed bandwidth.
bandwidth	Integer	Bandwidth range specified for the bandwidth package.
interflow_mode	String	Bandwidth package applicability. <ul style="list-style-type: none"> • Area: geographic regions • Region: cloud regions

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();
    request.withId("{id}");
    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.getHttpStatusCode());
    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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.id = "{id}"
        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{}
    request.Id = "{id}"
    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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

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.
id	Yes	String	Instance ID.

Request Parameters

Table 4-133 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

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.
resource_type	Yes	String	Type of the resource that the bandwidth package is bound to. cloud_connection: a cloud connection

Response Parameters

Status code: 201

Table 4-136 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
bandwidth_package	BandwidthPackage object	Bandwidth package.

Table 4-137 BandwidthPackage

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
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 resource belongs to.
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.
resource_type	String	Type of the resource that the bandwidth package is bound to. cloud_connection : a cloud connection
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

Parameter	Type	Description
		<p>on both the Chinese Mainland website and International website</p> <ul style="list-style-type: none"> ● 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 ● 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
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	Resource tags.

Parameter	Type	Description
status	String	Status of the bandwidth package. ACTIVE: The bandwidth package is available.
admin_state_up	Boolean	Administrative status of the bandwidth package.
order_id	String	Order ID of the bandwidth package.
product_id	String	Product ID of the bandwidth package.
charge_mode	String	Bandwidth billing option. The bandwidth is billed by fixed bandwidth.
bandwidth	Integer	Bandwidth range specified for the bandwidth package.
interflow_mode	String	Bandwidth package applicability. <ul style="list-style-type: none"> • Area: geographic regions • Region: cloud regions

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();
request.withId("{id}");
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.getHttpStatusCode());
    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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.id = "{id}"
        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{}
    request.Id = "{id}"
    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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-139 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-140 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

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_connection_id	Yes	String	Cloud connection ID.
bandwidth_package_id	Yes	String	Bandwidth package ID.
bandwidth	Yes	Integer	Inter-region bandwidth.
inter_region_ids	Yes	Array of strings	IDs of regions where the inter-region bandwidth is used for communications.

Response Parameters

Status code: 201

Table 4-143 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
inter_region_bandwidth	InterRegionBandwidth object	Inter-region bandwidth.

Table 4-144 InterRegionBandwidth

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
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	Cloud connection ID.
bandwidth_package_id	String	Bandwidth package ID.
inter_regions	Array of InterRegion objects	Inter-region bandwidth details.
bandwidth	Integer	Amount of bandwidth, in Mbit/s.

Table 4-145 InterRegion

Parameter	Type	Description
id	String	Instance ID.
project_id	String	Project ID.
local_region_id	String	ID of one region where an inter-region bandwidth is used.
remote_region_id	String	ID of another region where an inter-region bandwidth is used.

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.getStatusCode());
    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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-146 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-147 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 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.
id	No	Array of arrays	Resource ID. Multiple IDs can be queried.
enterprise_project_id	No	Array of strings	Enterprise project IDs.
cloud_connection_id	No	Array of arrays	Cloud connection IDs.
bandwidth_package_id	No	Array of strings	Bandwidth package list used to query inter-region bandwidths.

Request Parameters

Table 4-148 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-149 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.

Parameter	Type	Description
page_info	PageInfo object	Pagination query information.
inter_region_bandwidths	Array of InterRegionBandwidth objects	Inter-region bandwidth list.

Table 4-150 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Table 4-151 InterRegionBandwidth

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
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	Cloud connection ID.
bandwidth_package_id	String	Bandwidth package ID.
inter_regions	Array of InterRegion objects	Inter-region bandwidth details.
bandwidth	Integer	Amount of bandwidth, in Mbit/s.

Table 4-152 InterRegion

Parameter	Type	Description
id	String	Instance ID.
project_id	String	Project ID.
local_region_id	String	ID of one region where an inter-region bandwidth is used.
remote_region_id	String	ID of another region where an inter-region bandwidth is used.

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.*;

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();
        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.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
    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{}
    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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

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.
id	Yes	String	Instance ID.

Request Parameters

Table 4-154 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-155 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
inter_region_bandwidth	InterRegionBandwidth object	Inter-region bandwidth.

Table 4-156 InterRegionBandwidth

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
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	Cloud connection ID.
bandwidth_package_id	String	Bandwidth package ID.
inter_regions	Array of InterRegion objects	Inter-region bandwidth details.
bandwidth	Integer	Amount of bandwidth, in Mbit/s.

Table 4-157 InterRegion

Parameter	Type	Description
id	String	Instance ID.
project_id	String	Project ID.
local_region_id	String	ID of one region where an inter-region bandwidth is used.

Parameter	Type	Description
remote_region_id	String	ID of another region where an inter-region bandwidth is used.

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();
    request.withId("{id}");
    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

import os
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 = os.getenv("CLOUD_SDK_AK")
    sk = 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()
        request.id = "{id}"
        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{}
    request.Id = "{id}"
    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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

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.
id	Yes	String	Instance ID.

Request Parameters

Table 4-159 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

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.

Response Parameters

Status code: 200

Table 4-162 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
inter_region_bandwidth	InterRegionBandwidth object	Inter-region bandwidth.

Table 4-163 InterRegionBandwidth

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
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	Cloud connection ID.
bandwidth_package_id	String	Bandwidth package ID.
inter_regions	Array of InterRegion objects	Inter-region bandwidth details.
bandwidth	Integer	Amount of bandwidth, in Mbit/s.

Table 4-164 InterRegion

Parameter	Type	Description
id	String	Instance ID.

Parameter	Type	Description
project_id	String	Project ID.
local_region_id	String	ID of one region where an inter-region bandwidth is used.
remote_region_id	String	ID of another region where an inter-region bandwidth is used.

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();
        request.withId("{id}");
        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

import os
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 = os.environ["CLOUD_SDK_AK"]
sk = os.environ["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()
    request.id = "{id}"
    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{}
    request.Id = "{id}"
    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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

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.
id	Yes	String	Instance ID.

Request Parameters

Table 4-166 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

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();
```

```
request.withId("{id}");
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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.id = "{id}"
        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{}
request.Id = "{id}"
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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

GET /v3/{domain_id}/ccaas/cloud-connection-routes

Table 4-167 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-168 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 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.
cloud_connection_id	No	Array of arrays	Cloud connection IDs.
instance_id	No	Array of strings	Network instance ID used to query the list of cloud connection routes.
region_id	No	String	Region ID used to query the list of cloud connection routes.
id	No	String	IDs used for queries.

Request Parameters

Table 4-169 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-170 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
page_info	PageInfo object	Pagination query information.
cloud_connection_routes	Array of CloudConnectionRoute objects	List of cloud connection routes.

Table 4-171 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Table 4-172 CloudConnectionRoute

Parameter	Type	Description
id	String	Instance ID.
cloud_connection_id	String	Cloud connection ID.
domain_id	String	ID of the account that the instance belongs to.
instance_id	String	ID of the network instance (VPC or virtual gateway).

Parameter	Type	Description
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
destination	String	Destination address.

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" : "region-abc",
    "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.*;
```

```
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();  
        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  
  
import os  
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 = os.getenv("CLOUD_SDK_AK")  
    sk = 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()  
        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{}
    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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

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.
id	Yes	String	Instance ID.

Request Parameters

Table 4-174 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-175 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
cloud_connection_route	CloudConnectionRoute object	Cloud connection route.

Table 4-176 CloudConnectionRoute

Parameter	Type	Description
id	String	Instance ID.
cloud_connection_id	String	Cloud connection ID.
domain_id	String	ID of the account that the instance belongs to.
instance_id	String	ID of the network instance (VPC or virtual gateway).
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
destination	String	Destination address.

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" : "region-abc",
    "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();
        request.withId("{id}");
        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

import os
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 = os.environ["CLOUD_SDK_AK"]
```

```
sk = os.environ["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()
    request.id = "{id}"
    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{}
    request.Id = "{id}"
    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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

POST /v3/{domain_id}/ccaas/authorisations

Table 4-177 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-178 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

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	Instance name.
description	No	String	Resource description. Angle brackets (<>) are not allowed.
instance_id	Yes	String	ID of the network instance (VPC or virtual gateway).
project_id	Yes	String	Project ID.
region_id	Yes	String	Region ID.
cloud_connection_id	Yes	String	Cloud connection ID.
instance_type	Yes	String	Type of an authorized network instance. vpc indicates VPCs.
cloud_connection_domain_id	Yes	String	Account ID of the network instance that another account allows you to use.

Response Parameters

Status code: 201

Table 4-181 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
authorisation	Authorisation object	Authorization.

Table 4-182 Authorisation

Parameter	Type	Description
id	String	Instance ID.

Parameter	Type	Description
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
instance_id	String	ID of the network instance (VPC or virtual gateway).
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	Cloud connection ID.
status	String	Authorization status.
instance_type	String	Type of an authorized network instance.
cloud_connection_domain_id	String	Account ID of the network instance that another account allows you to use.
is_loaded_by_cloud_connection	Boolean	Specifies whether an authorized VPC has been loaded to a cloud connection.

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",
    "is_loaded_by_cloud_connection" : false
  }
}
```

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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

GET /v3/{domain_id}/ccaas/authorisations

Table 4-183 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-184 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 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.
id	No	Array of arrays	Resource ID. Multiple IDs can be queried.
name	No	Array of strings	Resource name. Multiple names can be queried.
description	No	Array of strings	Description. Multiple descriptions can be queried.
cloud_connection_id	No	Array of arrays	Cloud connection IDs.
instance_id	No	Array of strings	Network instance ID used to query authorizations.

Request Parameters

Table 4-185 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-186 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
page_info	PageInfo object	Pagination query information.
authorisations	Array of Authorisation objects	List of the authorized instances.

Table 4-187 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Table 4-188 Authorisation

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
instance_id	String	ID of the network instance (VPC or virtual gateway).
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	Cloud connection ID.

Parameter	Type	Description
status	String	Authorization status.
instance_type	String	Type of an authorized network instance.
cloud_connection_domain_id	String	Account ID of the network instance that another account allows you to use.
is_loaded_by_cloud_connection	Boolean	Specifies whether an authorized VPC has been loaded to a cloud connection.

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",
    "is_loaded_by_cloud_connection": true
  } ],
  "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.*;

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();
        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

import os
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 = os.getenv("CLOUD_SDK_AK")
    sk = 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()
    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{}
    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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

GET /v3/{domain_id}/ccaas/permissions

Table 4-189 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-190 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 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.
id	No	Array of arrays	Resource ID. Multiple IDs can be queried.
name	No	Array of strings	Resource name. Multiple names can be queried.
description	No	Array of strings	Description. Multiple descriptions can be queried.
cloud_connection_id	No	Array of arrays	Cloud connection IDs.
instance_id	No	Array of strings	Network instance ID used to query authorizations.

Request Parameters

Table 4-191 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-192 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
page_info	PageInfo object	Pagination query information.
permissions	Array of Permission objects	List of the authorized instances.

Table 4-193 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Table 4-194 Permission

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
instance_id	String	ID of the network instance (VPC or virtual gateway).
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_connection_id	String	Cloud connection ID.
status	String	Authorization status.

Parameter	Type	Description
instance_type	String	Type of an authorized network instance.
instance_domain_id	String	Account ID of the network instance that another account allows you to use.

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
  }
}
```

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

```
public class ListPermissionsSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_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();  
        ListPermissionsRequest request = new ListPermissionsRequest();  
        try {  
            ListPermissionsResponse response = client.listPermissions(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
            System.out.println(e.getHttpStatusCode());  
            System.out.println(e.getRequestId());  
            System.out.println(e.getErrorCode());  
            System.out.println(e.getErrorMsg());  
        }  
    }  
}
```

Python

```
# coding: utf-8  
  
import os  
from huaweicloudsdkcore.auth.credentials import 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 = os.getenv("CLOUD_SDK_AK")  
    sk = 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 = ListPermissionsRequest()  
        response = client.list_permissions(request)  
        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.ListPermissionsRequest{}
    response, err := client.ListPermissions(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 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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

PUT /v3/{domain_id}/ccaas/authorisations/{id}

Table 4-195 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
id	Yes	String	Instance ID.

Request Parameters

Table 4-196 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Table 4-197 Request body parameters

Parameter	Mandatory	Type	Description
authorisation	Yes	UpdateAuthorisation object	Details of the authorization to be updated.

Table 4-198 UpdateAuthorisation

Parameter	Mandatory	Type	Description
name	No	String	Instance name.
description	No	String	Resource description. Angle brackets (<>) are not allowed.

Response Parameters

Status code: 200

Table 4-199 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
authorisation	Authorisation object	Authorization.

Table 4-200 Authorisation

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
instance_id	String	ID of the network instance (VPC or virtual gateway).
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	Cloud connection ID.
status	String	Authorization status.
instance_type	String	Type of an authorized network instance.
cloud_connection_domain_id	String	Account ID of the network instance that another account allows you to use.

Parameter	Type	Description
is_loaded_by_cloud_connection	Boolean	Specifies whether an authorized VPC has been loaded to a cloud connection.

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",
    "is_loaded_by_cloud_connection": true
  }
}
```

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();
        request.withId("{id}");
        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

import os
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 = os.getenv("CLOUD_SDK_AK")
    sk = 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()  
  request.id = "{id}"  
  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{  
    request.Id = "{id}"  
    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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

DELETE /v3/{domain_id}/ccaas/authorisations/{id}

Table 4-201 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
id	Yes	String	Instance ID.

Request Parameters

Table 4-202 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

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();
request.withId("{id}");
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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.id = "{id}"
        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{}
    request.Id = "{id}"
    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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

POST /v3/{domain_id}/gcn/central-networks

Table 4-203 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-204 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

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	Instance name.
description	No	String	Resource description. Angle brackets (<>) are not allowed.
tags	No	Array of Tag objects	Resource tags.
enterprise_project_id	No	String	ID of the enterprise project that the resource belongs to.
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.
planes	Yes	Array of CentralNetworkPlaneDocument objects	List of the central network planes.
er_instances	No	Array of AssociateEnterpriseInstanceDocument objects	List of the enterprise routers on the central network.

Table 4-209 CentralNetworkPlaneDocument

Parameter	Mandatory	Type	Description
name	Yes	String	Instance name.
associate_enter_instances	No	Array of AssociateEnterpriseInstanceDocument objects	List of the enterprise routers on the central network.

Parameter	Mandatory	Type	Description
exclude_er_connections	No	Array of ExcludeErConnectionDocument objects	Whether to exclude the connections to enterprise routers on the central network.

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	ID of the enterprise router route table.

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	Request ID.
central_network	CentralNetwork object	Central network.

Table 4-214 CentralNetwork

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
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 resource belongs to.
tags	Array of Tag objects	Resource tags.
default_plane_id	String	ID of the default central network plane.

Parameter	Type	Description
planes	Array of CentralNetworkPlane objects	List of central network planes.
er_instances	Array of CentralNetworkErInstance objects	List of enterprise routers on a central network.
connections	Array of CentralNetworkErConnectionInfo objects	List of the enterprise router attachments on a central network.

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	Instance ID.
name	String	Instance name.
associate_er_tables	Array of AssociateErTableDocument objects	List of the enterprise routers on the central network.
exclude_er_connections	Array of ExcludeErConnectionDocument objects	Whether to exclude the connections to enterprise routers on the central network.

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	ID of the enterprise router route table.

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	Instance 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.
site_code	String	Site code.

Table 4-221 CentralNetworkConnectionInfo

Parameter	Type	Description
id	String	Instance ID.
plane_id	String	ID of the central network plane.
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Amount of bandwidth, 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.

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 4-222 ConnectionPoint

Parameter	Type	Description
id	String	Instance ID.
project_id	String	Project ID.
region_id	String	Region ID.
site_code	String	Site code.
instance_id	String	Instance ID at an end of a connection.
parent_instance_id	String	Parent resource ID of the instance at an end of a connection.

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

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" : "e9837622a6d4f31e4417b5432f42fafe",
  "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

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkkcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkkcc.v3 import *

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

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

GET /v3/{domain_id}/gcn/central-networks

Table 4-223 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-224 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 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.
sort_key	No	String	Field for sorting.
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 of arrays	Resource ID. Multiple IDs can be queried.
name	No	Array of strings	Resource name. Multiple names can be queried.
state	No	Array of arrays	Central network status. Multiple statuses can be queried.
enterprise_project_id	No	Array of strings	Enterprise project IDs.
enterprise_router_id	No	Array of arrays	Enterprise router IDs.
attachment_instance_id	No	Array of arrays	Attachment ID.
global_connection_bandwidth_id	No	Array of arrays	Bandwidth package IDs.
connection_id	No	Array of arrays	Connection ID.

Request Parameters

Table 4-225 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-226 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
page_info	PageInfo object	Pagination query information.
central_networks	Array of CentralNetwork objects	Central network list.

Table 4-227 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Table 4-228 CentralNetwork

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
created_at	String	Time when the resource was created. The time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.

Parameter	Type	Description
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 resource belongs to.
tags	Array of Tag objects	Resource tags.
default_plane_id	String	ID of the default central network plane.
planes	Array of CentralNetworkPlane objects	List of central network planes.
er_instances	Array of CentralNetworkEnterpriseRouterInstance objects	List of enterprise routers on a central network.
connections	Array of CentralNetworkEnterpriseRouterConnectionInfo objects	List of the enterprise router attachments on a central network.

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 (_).
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	Instance ID.
name	String	Instance name.
associate_er_tables	Array of AssociateErTable Document objects	List of the enterprise routers on the central network.
exclude_er_connections	Array of ExcludeErConnectionDocument objects	Whether to exclude the connections to enterprise routers on the central network.

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	ID of the enterprise router route table.

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	Instance 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.
site_code	String	Site code.

Table 4-235 CentralNetworkConnectionInfo

Parameter	Type	Description
id	String	Instance ID.
plane_id	String	ID of the central network plane.
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Amount of bandwidth, 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.
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	Instance ID.

Parameter	Type	Description
project_id	String	Project ID.
region_id	String	Region ID.
site_code	String	Site code.
instance_id	String	Instance ID at an end of a connection.
parent_instance_id	String	Parent resource ID of the instance at an end of a connection.
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.*;

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();
        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

import os
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 = os.getenv("CLOUD_SDK_AK")
    sk = 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()
    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{}
    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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

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.
central_network_id	Yes	String	Central network ID.

Request Parameters

Table 4-238 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-239 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
central_network	CentralNetwork object	Central network.

Table 4-240 CentralNetwork

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
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 resource belongs to.
tags	Array of Tag objects	Resource tags.
default_plane_id	String	ID of the default central network plane.
planes	Array of CentralNetworkPlane objects	List of central network planes.
er_instances	Array of CentralNetworkEnterpriseRouterInstance objects	List of enterprise routers on a central network.

Parameter	Type	Description
connections	Array of CentralNetworkConnectionInfo objects	List of the enterprise router attachments on a central network.

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 (_).
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	Instance ID.
name	String	Instance name.
associate_eras	Array of AssociateErTableDocuments objects	List of the enterprise routers on the central network.
exclude_eras	Array of ExcludeErConnectionDocuments objects	Whether to exclude the connections to enterprise routers on the central network.

Table 4-243 AssociateErTableDocument

Parameter	Type	Description
project_id	String	Project ID.
region_id	String	Region ID.
enterprise_router_id	String	Enterprise router ID.

Parameter	Type	Description
enterprise_router_table_id	String	ID of the enterprise router route table.

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	Instance 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.
site_code	String	Site code.

Table 4-247 CentralNetworkConnectionInfo

Parameter	Type	Description
id	String	Instance ID.

Parameter	Type	Description
plane_id	String	ID of the central network plane.
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Amount of bandwidth, 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.
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	Instance ID.
project_id	String	Project ID.
region_id	String	Region ID.
site_code	String	Site code.
instance_id	String	Instance ID at an end of a connection.
parent_instance_id	String	Parent resource ID of the instance at an end of a connection.
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 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();
        request.withCentralNetworkId("{central_network_id}");
        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

import os
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 = os.getenv("CLOUD_SDK_AK")
    sk = 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()  
    request.central_network_id = "{central_network_id}"  
    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{}  
    request.CentralNetworkId = "{central_network_id}"  
    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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

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.
central_network_id	Yes	String	Central network ID.

Request Parameters

Table 4-250 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

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	Instance name.
description	No	String	Resource description. Angle brackets (<>) are not allowed.
tags	No	Array of Tag objects	Resource tags.

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	Request ID.
central_network	CentralNetwork object	Central network.

Table 4-255 CentralNetwork

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
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 resource belongs to.
tags	Array of Tag objects	Resource tags.
default_plane_id	String	ID of the default central network plane.
planes	Array of CentralNetworkPlane objects	List of central network planes.
er_instances	Array of CentralNetworkEnterpriseRouterInstance objects	List of enterprise routers on a central network.

Parameter	Type	Description
connections	Array of CentralNetworkConnectionInfo objects	List of the enterprise router attachments on a central network.

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	Instance ID.
name	String	Instance name.
associate_er_tables	Array of AssociateErTableDocument objects	List of the enterprise routers on the central network.
exclude_er_connections	Array of ExcludeErConnectionDocument objects	Whether to exclude the connections to enterprise routers on the central network.

Table 4-258 AssociateErTableDocument

Parameter	Type	Description
project_id	String	Project ID.
region_id	String	Region ID.
enterprise_router_id	String	Enterprise router ID.

Parameter	Type	Description
enterprise_router_table_id	String	ID of the enterprise router route table.

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	Instance 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.
site_code	String	Site code.

Table 4-262 CentralNetworkConnectionInfo

Parameter	Type	Description
id	String	Instance ID.

Parameter	Type	Description
plane_id	String	ID of the central network plane.
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Amount of bandwidth, 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.
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	Instance ID.
project_id	String	Project ID.
region_id	String	Region ID.
site_code	String	Site code.
instance_id	String	Instance ID at an end of a connection.
parent_instance_id	String	Parent resource ID of the instance at an end of a connection.
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();
        request.withCentralNetworkId("{central_network_id}");
        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

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.central_network_id = "{central_network_id}"
        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{}
request.CentralNetworkId = "{central_network_id}"
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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

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.
central_network_id	Yes	String	Central network ID.

Request Parameters

Table 4-265 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 202

Table 4-266 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
central_network	CentralNetwork object	Central network.

Table 4-267 CentralNetwork

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
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.
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 resource belongs to.
tags	Array of Tag objects	Resource tags.
default_plane_id	String	ID of the default central network plane.
planes	Array of CentralNetworkPlane objects	List of central network planes.
router_instances	Array of CentralNetworkRouterInstance objects	List of enterprise routers on a central network.
connections	Array of CentralNetworkRouterConnectionInfo objects	List of the enterprise router attachments on a central network.

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	Instance ID.
name	String	Instance name.
associate_er_tables	Array of AssociateErTableDocument objects	List of the enterprise routers on the central network.
exclude_er_connections	Array of ExcludeErConnectionDocument objects	Whether to exclude the connections to enterprise routers on the central network.

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	ID of the enterprise router route table.

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	Instance 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.
site_code	String	Site code.

Table 4-274 CentralNetworkConnectionInfo

Parameter	Type	Description
id	String	Instance ID.
plane_id	String	ID of the central network plane.
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Amount of bandwidth, 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

Parameter	Type	Description
connection_point_pair	Array of ConnectionPoint objects	Both ends of a central network connection. The length is fixed to an array of 2.
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 4-275 ConnectionPoint

Parameter	Type	Description
id	String	Instance ID.
project_id	String	Project ID.
region_id	String	Region ID.
site_code	String	Site code.
instance_id	String	Instance ID at an end of a connection.
parent_instance_id	String	Parent resource ID of the instance at an end of a connection.

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();
        request.withCentralNetworkId("{central_network_id}");
        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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.central_network_id = "{central_network_id}"
        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{}
request.CentralNetworkId = "{central_network_id}"
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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

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.
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-277 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Table 4-278 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of Tag objects	<p>Billing option of a global private bandwidth.</p> <p>The options are as follows:</p> <ul style="list-style-type: none"> • bwd: billing by bandwidth • 95: standard 95th percentile bandwidth billing • 95avr: average daily 95th percentile bandwidth

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	String	-

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();
request.withCentralNetworkId("{central_network_id}");
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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.central_network_id = "{central_network_id}"
        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{}
    request.CentralNetworkId = "{central_network_id}"
    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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

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.
central_network_id	Yes	String	Central network ID.

Request Parameters

Table 4-282 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Table 4-283 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of Tag objects	Tags.

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	String	-

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

SDK Sample Code

The SDK sample code is as follows.

Java

Deleting a tag from 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 UntagCentralNetworkSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_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();
        UntagCentralNetworkRequest request = new UntagCentralNetworkRequest();
        request.withCentralNetworkId("{central_network_id}");
        UntagCentralNetworkRequestBody body = new UntagCentralNetworkRequestBody();
        List<Tag> listbodyTags = new ArrayList<>();
        listbodyTags.add(
            new Tag()
                .withKey("key")
                .withValue("value")
        );
        body.withTags(listbodyTags);
        request.withBody(body);
        try {
            UntagCentralNetworkResponse response = client.untagCentralNetwork(request);
            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 central network

```
# coding: utf-8

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = UntagCentralNetworkRequest()
        request.central_network_id = "{central_network_id}"
        listTagsbody = [
            Tag(
                key="key",
                value="value"
            )
        ]
        request.body = UntagCentralNetworkRequestBody(
            tags=listTagsbody
        )
        response = client.untag_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

Deleting a tag from 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.UntagCentralNetworkRequest{}
request.CentralNetworkId = "{central_network_id}"
valueTags:= "value"
var listTagsbody = []model.Tag{
    {
        Key: "key",
        Value: &valueTags,
    },
}
request.Body = &model.UntagCentralNetworkRequestBody{
    Tags: listTagsbody,
}
response, err := client.UntagCentralNetwork(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 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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

GET /v3/{domain_id}/gcn/central-networks/tags

Table 4-286 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-287 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-288 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
tags	Array of MultivaluedTag objects	All tags of the central network.

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.

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

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import 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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

POST /v3/{domain_id}/gcn/central-networks/filter

Table 4-290 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-291 Query Parameters

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

Request Parameters

Table 4-292 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Table 4-293 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of MultivaluedTag objects	Tags.

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.

Response Parameters

Status code: 200

Table 4-295 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
page_info	PageInfo object	Pagination query information.
central_networks	Array of CentralNetwork objects	Central network list.

Table 4-296 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Table 4-297 CentralNetwork

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.

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.
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 resource belongs to.
tags	Array of Tag objects	Resource tags.
default_plane_id	String	ID of the default central network plane.
planes	Array of CentralNetworkPlane objects	List of central network planes.
er_instances	Array of CentralNetworkEnterpriseRouterInstance objects	List of enterprise routers on a central network.
connections	Array of CentralNetworkEnterpriseRouterConnectionInfo objects	List of the enterprise router attachments on a central network.

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	Instance ID.
name	String	Instance name.
associate_er_tables	Array of AssociateErTable Document objects	List of the enterprise routers on the central network.
exclude_er_connections	Array of ExcludeErConnectionDocument objects	Whether to exclude the connections to enterprise routers on the central network.

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	ID of the enterprise router route table.

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	Instance 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.
site_code	String	Site code.

Table 4-304 CentralNetworkConnectionInfo

Parameter	Type	Description
id	String	Instance ID.
plane_id	String	ID of the central network plane.
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Amount of bandwidth, 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.
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 4-305 ConnectionPoint

Parameter	Type	Description
id	String	Instance ID.

Parameter	Type	Description
project_id	String	Project ID.
region_id	String	Region ID.
site_code	String	Site code.
instance_id	String	Instance ID at an end of a connection.
parent_instance_id	String	Parent resource ID of the instance at an end of a connection.
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 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 have been 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();
        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.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Querying central networks by tag

```
# coding: utf-8

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        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{}
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 have been 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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

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.
central_network_id	Yes	String	Central network ID.

Request Parameters

Table 4-307 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

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.
planes	Yes	Array of CentralNetworkPlaneDocument objects	List of the central network planes.

Parameter	Mandatory	Type	Description
er_instances	No	Array of AssociateErInstanceDocument objects	List of the enterprise routers on the central network.

Table 4-310 CentralNetworkPlaneDocument

Parameter	Mandatory	Type	Description
name	Yes	String	Instance name.
associate_er_tables	No	Array of AssociateErTableDocument objects	List of the enterprise routers on the central network.
exclude_er_connections	No	Array of ExcludeErConnectionDocument objects	Whether to exclude the connections to enterprise routers on the central network.

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	ID of the enterprise router route table.

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	Request ID.
central_network_policy	CentralNetworkPolicy object	Details of the central network policy.

Table 4-315 CentralNetworkPolicy

Parameter	Type	Description
id	String	Instance 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.

Parameter	Type	Description
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.
document	CentralNetworkPolicyDocument object	Central network policy document.

Table 4-316 CentralNetworkPolicyDocument

Parameter	Type	Description
default_plane	String	Name of the default central network plane.
planes	Array of CentralNetworkPlaneDocument objects	List of the central network planes.
er_instances	Array of AssociateErInstanceDocument objects	List of the enterprise routers on the central network.

Table 4-317 CentralNetworkPlaneDocument

Parameter	Type	Description
name	String	Instance name.
associate_er_tables	Array of AssociateErTableDocument objects	List of the enterprise routers on the central network.
exclude_er_connections	Array of ExcludeErConnectionDocument objects	Whether to exclude the connections to enterprise routers on the central network.

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	ID of the enterprise router route table.

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" : "region-abc"
    } ]
  }
}
```


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": "region-abc",
          "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": "region-abc"
    } ]
  }
}
```

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();
request.withCentralNetworkId("{central_network_id}");
CreateCentralNetworkPolicyRequestBody body = new CreateCentralNetworkPolicyRequestBody();
List<AssociateErInstanceDocument> listCentralNetworkPolicyDocumentErInstances = new
ArrayList<>();
listCentralNetworkPolicyDocumentErInstances.add(
    new AssociateErInstanceDocument()
        .withEnterpriseRouterId("395b0884-aab4-4bf0-8cb8-7f2da26708dd")
        .withRegionId("region-abc")
        .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

import os
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 = os.environ["CLOUD_SDK_AK"]
sk = os.environ["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()
    request.central_network_id = "{central_network_id}"
    listErInstancesCentralNetworkPolicyDocument = [
        AssociateErInstanceDocument(
            enterprise_router_id="395b0884-aab4-4bf0-8cb8-7f2da26708dd",
            region_id="region-abc",
            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{}
request.CentralNetworkId = "{central_network_id}"
var listErInstancesCentralNetworkPolicyDocument = []model.AssociateErInstanceDocument{
    {
        EnterpriseRouterId: "395b0884-aab4-4bf0-8cb8-7f2da26708dd",
        RegionId: "region-abc",
        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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

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.
central_network_id	Yes	String	Central network ID.

Table 4-322 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 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.
sort_key	No	String	Field for sorting.
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 of arrays	Resource ID. Multiple IDs can be queried.
state	No	Array of arrays	Policy status. Multiple statuses can be queried.
version	No	Array of arrays	Version. Multiple versions can be queried.
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.

Response Parameters

Status code: 200

Table 4-324 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
page_info	PageInfo object	Pagination query information.
central_network_policies	Array of CentralNetworkPolicy objects	List of the central network policies.

Table 4-325 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Table 4-326 CentralNetworkPolicy

Parameter	Type	Description
id	String	Instance 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.
document	CentralNetworkPolicyDocument object	Central network policy document.

Table 4-327 CentralNetworkPolicyDocument

Parameter	Type	Description
default_plane	String	Name of the default central network plane.
planes	Array of CentralNetworkPlaneDocument objects	List of the central network planes.
er_instances	Array of AssociateErInstanceDocument objects	List of the enterprise routers on the central network.

Table 4-328 CentralNetworkPlaneDocument

Parameter	Type	Description
name	String	Instance name.
associate_er_tables	Array of AssociateErTableDocument objects	List of the enterprise routers on the central network.
exclude_er_connections	Array of ExcludeErConnectionDocument objects	Whether to exclude the connections to enterprise routers on the central network.

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	ID of the enterprise router route table.

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.

Parameter	Type	Description
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": "region-abc",
          "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": "region-abc"
    } ]
  } ]
}
```

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 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.withCentralNetworkId("{central_network_id}");
        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.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import 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 = os.getenv("CLOUD_SDK_AK")
    sk = 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.central_network_id = "{central_network_id}"
    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{}
    request.CentralNetworkId = "{central_network_id}"
    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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

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.
policy_id	Yes	String	Central network policy ID.
central_network_id	Yes	String	Central network ID.

Request Parameters

Table 4-333 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 202

Table 4-334 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
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	Instance 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.
document	CentralNetworkPolicyDocument object	Central network policy document.

Table 4-336 CentralNetworkPolicyDocument

Parameter	Type	Description
default_plane	String	Name of the default central network plane.
planes	Array of CentralNetworkPlaneDocument objects	List of the central network planes.
er_instances	Array of AssociateErInstanceDocument objects	List of the enterprise routers on the central network.

Table 4-337 CentralNetworkPlaneDocument

Parameter	Type	Description
name	String	Instance name.
associate_er_tables	Array of AssociateErTableDocument objects	List of the enterprise routers on the central network.
exclude_er_connections	Array of ExcludeErConnectionDocument objects	Whether to exclude the connections to enterprise routers on the central network.

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	ID of the enterprise router route table.

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>Instance status.</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. ● SwitchCentralNetworkErTable: changes the enterprise router route table on 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": "region-abc",
          "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": "region-abc"
      } ]
    } ],
    "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": "region-abc",
          "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": "region-abc",
          "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": "region-abc"
      }
    },
    {
      "operation_id": "DeleteCentralNetworkErInstance",
      "delete_central_network_er_instance": {
        "enterprise_router_id": "395b0884-aab4-4bf0-8cb8-7f2da26708dd",
        "project_id": "XXX",
        "region_id": "region-abc"
      }
    },
    {
      "operation_id": "CreateCentralNetworkErConnection",
      "central_network_plane_name": "default-plane",
      "index": 0,
      "create_central_network_er_connection": [ {
        "project_id": "XXX",
        "region_id": "region-abc-1",

```

```
"enterprise_router_id" : "c9c9c756-6984-4866-bab7-5b55c81594bd",
"enterprise_router_table_id" : "58613052-f9d4-4fa4-a3f0-6d6873190826"
}, {
  "project_id" : "8d01a037388442f6a2e435f4f30860a3",
  "region_id" : "region-abc-2",
  "enterprise_router_id" : "58fad9c1-b4bd-4622-84e4-a0fcb2423601",
  "enterprise_router_table_id" : "a5347056-e29f-4192-9256-e151c61f854c"
}]
}, {
  "operation_id" : "DeleteCentralNetworkErConnection",
  "central_network_plane_name" : "default-plane",
  "index" : 1,
  "delete_central_network_er_connection" : [ {
    "project_id" : "XXX",
    "region_id" : "region-abc-1",
    "enterprise_router_id" : "c9c9c756-6984-4866-bab7-5b55c81594bd",
    "enterprise_router_table_id" : "58613052-f9d4-4fa4-a3f0-6d6873190826"
  }, {
    "project_id" : "8d01a037388442f6a2e435f4f30860a3",
    "region_id" : "region-abc-2",
    "enterprise_router_id" : "58fad9c1-b4bd-4622-84e4-a0fcb2423601",
    "enterprise_router_table_id" : "a5347056-e29f-4192-9256-e151c61f854c"
  }
]
}, {
  "operation_id" : "CreateCentralNetworkErTable",
  "central_network_plane_name" : "default-plane",
  "create_central_network_er_table" : {
    "project_id" : "XXX",
    "region_id" : "region-abc",
    "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",
  "delete_central_network_er_table" : {
    "project_id" : "XXX",
    "region_id" : "region-abc",
    "enterprise_router_id" : "395b0884-aab4-4bf0-8cb8-7f2da26708dd",
    "enterprise_router_table_id" : "cc542128-5c2d-402a-8960-53bb2ed9484e"
  }
}, {
  "operation_id" : "SwitchCentralNetworkErTable",
  "central_network_plane_name" : "default-plane",
  "switch_central_network_er_table" : {
    "project_id" : "XXX",
    "region_id" : "region-abc",
    "enterprise_router_id" : "5cc75ed0-bd6c-3af4-663b-caba3315bb08",
    "original_enterprise_router_table_id" : "b705f49e-df88-eaf3-3aeb-95d534138156",
    "new_enterprise_router_table_id" : "b705f49e-df88-eaf3-3aeb-95d534138158"
  }
}
}]
}
```

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();
        request.withPolicyId("{policy_id}");
        request.withCentralNetworkId("{central_network_id}");
        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

import os
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 = os.getenv("CLOUD_SDK_AK")
    sk = 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()
    request.policy_id = "{policy_id}"
    request.central_network_id = "{central_network_id}"
    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{}
    request.PolicyId = "{policy_id}"
    request.CentralNetworkId = "{central_network_id}"
    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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

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.
policy_id	Yes	String	Central network policy ID.
central_network_id	Yes	String	Central network ID.

Request Parameters

Table 4-343 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 204

Table 4-344 Response header parameters

Parameter	Type	Description
x-request-id	String	-

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();
        request.withPolicyId("{policy_id}");
        request.withCentralNetworkId("{central_network_id}");
        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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.policy_id = "{policy_id}"
        request.central_network_id = "{central_network_id}"
        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{}
request.PolicyId = "{policy_id}"
request.CentralNetworkId = "{central_network_id}"
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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

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.
policy_id	Yes	String	Central network policy ID.
central_network_id	Yes	String	Central network ID.

Request Parameters

Table 4-346 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-347 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
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.
previous_marker	String	Forward pagination identifier.

Parameter	Type	Description
current_count	Integer	Number of the resources in the current list.

Table 4-349 CentralNetworkElementChange

Parameter	Type	Description
operation_id	String	<p>Instance status.</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. • SwitchCentralNetworkErTable: changes the enterprise router route table on 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": "region-abc",
        "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": "region-abc",
      "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": "region-abc"
  }
}, {
  "operation_id": "DeleteCentralNetworkErInstance",
  "delete_central_network_er_instance": {
    "enterprise_router_id": "395b0884-aab4-4bf0-8cb8-7f2da26708dd",
    "project_id": "XXX",
    "region_id": "region-abc"
  }
}, {
  "operation_id": "CreateCentralNetworkErConnection",
  "central_network_plane_name": "default-plane",
  "index": 0,
  "create_central_network_er_connection": [ {
    "project_id": "XXX",
    "region_id": "region-abc-1",
    "enterprise_router_id": "c9c9c756-6984-4866-bab7-5b55c81594bd",
    "enterprise_router_table_id": "58613052-f9d4-4fa4-a3f0-6d6873190826"
  }, {
    "project_id": "8d01a037388442f6a2e435f4f30860a3",
    "region_id": "region-abc-2",
    "enterprise_router_id": "58fad9c1-b4bd-4622-84e4-a0fcb2423601",
    "enterprise_router_table_id": "a5347056-e29f-4192-9256-e151c61f854c"
  } ]
}, {
  "operation_id": "DeleteCentralNetworkErConnection",
  "central_network_plane_name": "default-plane",
  "index": 1,
  "delete_central_network_er_connection": [ {
    "project_id": "XXX",
    "region_id": "region-abc-1",
```

```
"enterprise_router_id" : "c9c9c756-6984-4866-bab7-5b55c81594bd",
"enterprise_router_table_id" : "58613052-f9d4-4fa4-a3f0-6d6873190826"
}, {
"project_id" : "8d01a037388442f6a2e435f4f30860a3",
"region_id" : "region-abc-2",
"enterprise_router_id" : "58fad9c1-b4bd-4622-84e4-a0fcb2423601",
"enterprise_router_table_id" : "a5347056-e29f-4192-9256-e151c61f854c"
}]
}, {
"operation_id" : "CreateCentralNetworkErTable",
"central_network_plane_name" : "default-plane",
"create_central_network_er_table" : {
"project_id" : "XXX",
"region_id" : "region-abc",
"enterprise_router_id" : "c73b26b7-33f0-438d-b440-8e87dfe6fef9",
"enterprise_router_table_id" : "c0d51f20-0313-40f7-a74e-9dcc5da21c0"
}
}, {
"operation_id" : "DeleteCentralNetworkErTable",
"central_network_plane_name" : "default-plane",
"delete_central_network_er_table" : {
"project_id" : "XXX",
"region_id" : "region-abc",
"enterprise_router_id" : "395b0884-aab4-4bf0-8cb8-7f2da26708dd",
"enterprise_router_table_id" : "cc542128-5c2d-402a-8960-53bb2ed9484e"
}
}, {
"operation_id" : "SwitchCentralNetworkErTable",
"central_network_plane_name" : "default-plane",
"switch_central_network_er_table" : {
"project_id" : "XXX",
"region_id" : "region-abc",
"enterprise_router_id" : "5cc75ed0-bd6c-3af4-663b-caba3315bb08",
"original_enterprise_router_table_id" : "b705f49e-df88-eaf3-3aeb-95d534138156",
"new_enterprise_router_table_id" : "b705f49e-df88-eaf3-3aeb-95d534138158"
}
}]
}
```

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 ListCentralNetworkPolicyChangeSetSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_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();
ListCentralNetworkPolicyChangeSetRequest request = new
ListCentralNetworkPolicyChangeSetRequest();
request.withPolicyId("{policy_id}");
request.withCentralNetworkId("{central_network_id}");
try {
    ListCentralNetworkPolicyChangeSetResponse response =
client.listCentralNetworkPolicyChangeSet(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import 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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListCentralNetworkPolicyChangeSetRequest()
        request.policy_id = "{policy_id}"
        request.central_network_id = "{central_network_id}"
        response = client.list_central_network_policy_change_set(request)
        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.ListCentralNetworkPolicyChangeSetRequest{}
    request.PolicyId = "{policy_id}"
    request.CentralNetworkId = "{central_network_id}"
    response, err := client.ListCentralNetworkPolicyChangeSet(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	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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

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.
central_network_id	Yes	String	Central network ID.

Request Parameters

Table 4-351 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

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	Instance name.
description	No	String	Resource description. Angle brackets (<>) are not allowed.
enterprise_router_id	Yes	String	Enterprise router ID.
global_dc_gateway_id	Yes	String	Global DC gateway ID.
global_dc_gateway_project_id	Yes	String	Project ID of the global DC gateway.
global_dc_gateway_region_id	Yes	String	Region ID of the global DC gateway.
enterprise_router_project_id	Yes	String	Project ID of the enterprise router.
enterprise_router_region_id	Yes	String	Region ID of an enterprise router.
central_network_plane_id	No	String	ID of the central network plane.

Response Parameters

Status code: 202

Table 4-354 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
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	Instance ID.
name	String	Instance name.

Parameter	Type	Description
description	String	Resource description. Angle brackets (<>) are not allowed.
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 connection bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global connection bandwidth. • TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.
bandwidth_size	Integer	Amount of bandwidth, 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 an enterprise router.
enterprise_router_attachment_id	String	Attachment ID of the enterprise router.
global_dc_gateway_peer_link_id	String	Peer link ID of the global DC gateway.
global_dc_gateway_id	String	Global DC gateway ID.
global_dc_gateway_project_id	String	Project ID of the global DC gateway.
global_dc_gateway_region_id	String	Region ID of the global DC gateway.
enterprise_router_site_code	String	Site code of the enterprise router on a central network.
global_dc_gateway_site_code	String	Site code.

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" : "region-abc",
    "global_dc_gateway_project_id" : "32f7402e18154ce5861c9989df956394",
    "global_dc_gateway_region_id" : "region-abc",
    "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" : "region-abc",
    "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" : "region-abc",
    "enterprise_router_site_code" : "site-abc",
    "global_dc_gateway_site_code" : "site-abc"
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Adding a global DC gateway 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.*;

public class CreateCentralNetworkGdgwAttachmentSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_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();
        CreateCentralNetworkGdgwAttachmentRequest request = new
        CreateCentralNetworkGdgwAttachmentRequest();
        request.withCentralNetworkId("{central_network_id}");
        CreateCentralNetworkGdgwAttachmentRequestBody body = new
        CreateCentralNetworkGdgwAttachmentRequestBody();
        CreateCentralNetworkGdgwAttachment centralNetworkGdgwAttachmentbody = new
        CreateCentralNetworkGdgwAttachment();
        centralNetworkGdgwAttachmentbody.withGlobalDcGatewayRegionId("region-abc")
            .withCentralNetworkPlaneId("a3bad420-33b8-4e26-9e9b-bdf67aa8e72b")
            .withEnterpriseRouterId("a3bad420-33b8-4e26-9e9b-bdf67aa8e72b")
            .withEnterpriseRouterProjectId("32f7402e18154ce5861c9989df956394")
            .withName("name")
            .withGlobalDcGatewayId("a3bad420-33b8-4e26-9e9b-bdf67aa8e72b")
            .withEnterpriseRouterRegionId("region-abc")
            .withDescription("description")
            .withGlobalDcGatewayProjectId("32f7402e18154ce5861c9989df956394");
        body.withCentralNetworkGdgwAttachment(centralNetworkGdgwAttachmentbody);
        request.withBody(body);
        try {
            CreateCentralNetworkGdgwAttachmentResponse response =
            client.createCentralNetworkGdgwAttachment(request);
            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 global DC gateway to a central network

```
# coding: utf-8

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = CreateCentralNetworkGdgwAttachmentRequest()
        request.central_network_id = "{central_network_id}"
        centralNetworkGdgwAttachmentbody = CreateCentralNetworkGdgwAttachment(
            global_dc_gateway_region_id="region-abc",
            central_network_plane_id="a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
            enterprise_router_id="a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
            enterprise_router_project_id="32f7402e18154ce5861c9989df956394",
            name="name",
            global_dc_gateway_id="a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
            enterprise_router_region_id="region-abc",
            description="description",
            global_dc_gateway_project_id="32f7402e18154ce5861c9989df956394"
        )
        request.body = CreateCentralNetworkGdgwAttachmentRequestBody(
            central_network_gdgw_attachment=centralNetworkGdgwAttachmentbody
        )
        response = client.create_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

Adding a global DC gateway 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.CreateCentralNetworkGdgwAttachmentRequest{}
request.CentralNetworkId = "{central_network_id}"
centralNetworkPlaneIdCentralNetworkGdgwAttachment:= "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b"
descriptionCentralNetworkGdgwAttachment:= "description"
centralNetworkGdgwAttachmentbody := &model.CreateCentralNetworkGdgwAttachment{
    GlobalDcGatewayRegionId: "region-abc",
    CentralNetworkPlaneId: &centralNetworkPlaneIdCentralNetworkGdgwAttachment,
    EnterpriseRouterId: "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    EnterpriseRouterProjectId: "32f7402e18154ce5861c9989df956394",
    Name: "name",
    GlobalDcGatewayId: "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    EnterpriseRouterRegionId: "region-abc",
    Description: &descriptionCentralNetworkGdgwAttachment,
    GlobalDcGatewayProjectId: "32f7402e18154ce5861c9989df956394",
}
request.Body = &model.CreateCentralNetworkGdgwAttachmentRequestBody{
    CentralNetworkGdgwAttachment: centralNetworkGdgwAttachmentbody,
}
response, err := client.CreateCentralNetworkGdgwAttachment(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 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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

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.
central_network_id	Yes	String	Central network ID.

Table 4-357 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 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.
sort_key	No	String	Field for sorting.
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 of arrays	Resource ID. Multiple IDs can be queried.
name	No	Array of strings	Resource name. Multiple names can be queried.
state	No	Array of arrays	Central network connection status. Multiple statuses can be queried.
global_dc_gateway_id	No	Array of arrays	Global DC gateway IDs.

Request Parameters

Table 4-358 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-359 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
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.

Table 4-360 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.

Parameter	Type	Description
current_count	Integer	Number of the resources in the current list.

Table 4-361 CentralNetworkGdgwAttachment

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

Parameter	Type	Description
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 connection bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global connection bandwidth.• TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.
bandwidth_size	Integer	Amount of bandwidth, 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 an enterprise router.
enterprise_router_attachment_id	String	Attachment ID of the enterprise router.
global_dc_gateway_peer_link_id	String	Peer link ID of the global DC gateway.
global_dc_gateway_id	String	Global DC gateway ID.
global_dc_gateway_project_id	String	Project ID of the global DC gateway.
global_dc_gateway_region_id	String	Region ID of the global DC gateway.

Parameter	Type	Description
enterprise_router_site_code	String	Site code of the enterprise router on a central network.
global_dc_gateway_site_code	String	Site code.

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_gdgd_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": "region-abc",
    "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": "region-abc",
    "enterprise_router_site_code": "site-abc",
    "global_dc_gateway_site_code": "site-abc"
  } ]
}
```

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 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.withCentralNetworkId("{central_network_id}");
        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

import os
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 = os.getenv("CLOUD_SDK_AK")
    sk = 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.central_network_id = "{central_network_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{}
    request.CentralNetworkId = "{central_network_id}"
    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 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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

GET /v3/{domain_id}/gcn/central-network/{central_network_id}/gdgw-attachments/{gdgw_attachment_id}

Table 4-362 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
central_network_id	Yes	String	Central network ID.
gdgw_attachment_id	Yes	String	ID of the global DC gateway attachment on the central network.

Request Parameters

Table 4-363 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-364 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
central_network_gdgw_attachment	CentralNetworkGdgwAttachment object	Details of the global DC gateway used as an attachment.

Table 4-365 CentralNetworkGdgwAttachment

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
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.

Parameter	Type	Description
bandwidth_type	String	Bandwidth type. The bandwidth types are as follows: <ul style="list-style-type: none">• BandwidthPackage: A global connection bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global connection bandwidth.• TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.
bandwidth_size	Integer	Amount of bandwidth, 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 an enterprise router.
enterprise_router_attachment_id	String	Attachment ID of the enterprise router.
global_dc_gateway_peer_link_id	String	Peer link ID of the global DC gateway.
global_dc_gateway_id	String	Global DC gateway ID.
global_dc_gateway_project_id	String	Project ID of the global DC gateway.
global_dc_gateway_region_id	String	Region ID of the global DC gateway.
enterprise_router_site_code	String	Site code of the enterprise router on a central network.
global_dc_gateway_site_code	String	Site code.

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" : "region-abc",
    "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" : "region-abc",
    "enterprise_router_site_code" : "site-abc",
    "global_dc_gateway_site_code" : "site-abc"
  }
}
```

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();
request.withCentralNetworkId("{central_network_id}");
request.withGdgwAttachmentId("{gdgw_attachment_id}");
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.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import 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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.central_network_id = "{central_network_id}"
        request.gdgw_attachment_id = "{gdgw_attachment_id}"
        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{}
    request.CentralNetworkId = "{central_network_id}"
    request.GdgwAttachmentId = "{gdgw_attachment_id}"
    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](#).

4.8.4 Updating a Global DC Gateway on a Central Network

Function

This API is used to update a global DC gateway on a central network.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

PUT /v3/{domain_id}/gcn/central-network/{central_network_id}/gdgw-attachments/{gdgw_attachment_id}

Table 4-366 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
central_network_id	Yes	String	Central network ID.
gdgw_attachment_id	Yes	String	ID of the global DC gateway attachment on the central network.

Request Parameters

Table 4-367 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Table 4-368 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 4-369 UpdateCentralNetworkGdgwAttachment

Parameter	Mandatory	Type	Description
name	No	String	Instance name.
description	No	String	Resource description. Angle brackets (<>) are not allowed.

Response Parameters

Status code: 200

Table 4-370 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
central_network_gdgw_attachment	CentralNetworkGdgwAttachment object	Details of the global DC gateway used as an attachment.

Table 4-371 CentralNetworkGdgwAttachment

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
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.

Parameter	Type	Description
bandwidth_type	String	Bandwidth type. The bandwidth types are as follows: <ul style="list-style-type: none"> • BandwidthPackage: A global connection bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global connection bandwidth. • TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.
bandwidth_size	Integer	Amount of bandwidth, 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 an enterprise router.
enterprise_router_attachment_id	String	Attachment ID of the enterprise router.
global_dc_gateway_peer_link_id	String	Peer link ID of the global DC gateway.
global_dc_gateway_id	String	Global DC gateway ID.
global_dc_gateway_project_id	String	Project ID of the global DC gateway.
global_dc_gateway_region_id	String	Region ID of the global DC gateway.
enterprise_router_site_code	String	Site code of the enterprise router on a central network.
global_dc_gateway_site_code	String	Site code.

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" : "region-abc",
    "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" : "region-abc",
    "enterprise_router_site_code" : "site-abc",
    "global_dc_gateway_site_code" : "site-abc"
  }
}
```

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();
request.withCentralNetworkId("{central_network_id}");
request.withGdgwAttachmentId("{gdgw_attachment_id}");
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

import os
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 = os.getenv("CLOUD_SDK_AK")
    sk = 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()  
    request.central_network_id = "{central_network_id}"  
    request.gdgw_attachment_id = "{gdgw_attachment_id}"  
    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{}  
    request.CentralNetworkId = "{central_network_id}"  
    request.GdgwAttachmentId = "{gdgw_attachment_id}"  
    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](#).

4.8.5 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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

POST /v3/{domain_id}/gcn/central-network/{central_network_id}/er-route-table-attachments

Table 4-372 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
central_network_id	Yes	String	Central network ID.

Request Parameters

Table 4-373 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Table 4-374 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 4-375 CreateCentralNetworkErRouteTableAttachment

Parameter	Mandatory	Type	Description
name	Yes	String	Instance name.
description	No	String	Resource description. Angle brackets (<>) are not allowed.
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 an enterprise router.
central_network_plane_id	Yes	String	ID of the central network plane.
attachment_id	No	String	Attachment ID of the enterprise router or peer link ID of the global DC gateway.
enterprise_router_table_id	Yes	String	ID of the enterprise router route table.
attached_enter_table_project_id	Yes	String	Project ID of an enterprise router added to a central network.

Parameter	Mandatory	Type	Description
attached_enterprise_region_id	Yes	String	Region ID of an enterprise router.
attached_enterprise_router_id	Yes	String	ID of an enterprise router added to a central network.
attached_enterprise_router_route_table_id	Yes	String	Route table ID of an enterprise router added to a central network.
hosted_cloud	Yes	String	<ul style="list-style-type: none"> • HWCloud: Huawei Cloud • Ireland: Ireland site

Response Parameters

Status code: 202

Table 4-376 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
central_network_enterprise_router_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	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
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.

Parameter	Type	Description
bandwidth_type	String	Bandwidth type. The bandwidth types are as follows: <ul style="list-style-type: none"> • BandwidthPackage: A global connection bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global connection bandwidth. • TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.
bandwidth_size	Integer	Amount of bandwidth, 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 an enterprise router.
enterprise_router_attachment_id	String	Attachment ID of the enterprise router.
enterprise_router_table_id	String	ID of the enterprise router route table.
enterprise_router_site_code	String	Site code of the enterprise router on a central network.
attached_er_table_project_id	String	Project ID of an enterprise router added to a central network.
attached_er_table_region_id	String	Region ID of an enterprise router.
attached_er_id	String	ID of an enterprise router added to a central network.
attached_er_table_id	String	Route table ID of an enterprise router added to a central network.
attached_er_attachment_id	String	Attachment ID of an enterprise router added to a central network.
attached_er_table_site_code	String	Site code of an enterprise router added to a central network.

Parameter	Type	Description
hosted_cloud	String	Huawei Cloud or partner cloud. <ul style="list-style-type: none">• HWCloud: Huawei Cloud• Ireland: partner cloud in Ireland
approved_state	String	Approval status. <ul style="list-style-type: none">• APPROVING: Approving• APPROVED: Approved• UNAPPROVED: Approval failed
reason	String	Reason for rejecting an enterprise router route table as an attachment.

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" : "region-abc",
    "enterprise_router_table_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "attached_er_table_project_id" : "32f7402e18154ce5861c9989df956394",
    "attached_er_table_region_id" : "region-abc",
    "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" : "region-abc",
"enterprise_router_attachment_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
"enterprise_router_table_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
"enterprise_router_site_code" : "site-abc",
"attached_er_table_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
"attached_er_table_region_id" : "region-abc",
"attached_er_table_project_id" : "XXX",
"attached_er_table_site_code" : "site-abc",
"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();
        request.withCentralNetworkId("{central_network_id}");
        CreateCentralNetworkErRouteTableAttachmentsRequestBody body = new
        CreateCentralNetworkErRouteTableAttachmentsRequestBody();
        CreateCentralNetworkErRouteTableAttachment centralNetworkErRouteTableAttachmentbody = new
        CreateCentralNetworkErRouteTableAttachment();
```

```
centralNetworkErRouteTableAttachmentbody.withHostedCloud(CreateCentralNetworkErRouteTableAttachme
nt.HostedCloudEnum.fromValue("HWCloud"))
    .withEnterpriseRouterId("a3bad420-33b8-4e26-9e9b-bdf67aa8e72b")
    .withEnterpriseRouterProjectId("32f7402e18154ce5861c9989df956394")
    .withEnterpriseRouterRegionId("region-abc")
    .withDescription("description")
    .withEnterpriseRouterTableId("a3bad420-33b8-4e26-9e9b-bdf67aa8e72b")
    .withCentralNetworkPlaneId("a3bad420-33b8-4e26-9e9b-bdf67aa8e72b")
    .withName("name")
    .withAttachedErTableRegionId("region-abc")
    .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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.central_network_id = "{central_network_id}"
        centralNetworkErRouteTableAttachmentbody = CreateCentralNetworkErRouteTableAttachment(
            hosted_cloud="HWCloud",
            enterprise_router_id="a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
            enterprise_router_project_id="32f7402e18154ce5861c9989df956394",
```

```
enterprise_router_region_id="region-abc",
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="region-abc",
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{}
    request.CentralNetworkId = "{central_network_id}"
    descriptionCentralNetworkErRouteTableAttachment := "description"
    centralNetworkErRouteTableAttachmentbody := &model.CreateCentralNetworkErRouteTableAttachment{
        HostedCloud:
    model.GetCreateCentralNetworkErRouteTableAttachmentHostedCloudEnum().HW_CLOUD,
        EnterpriseRouterId: "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
        EnterpriseRouterProjectId: "32f7402e18154ce5861c9989df956394",
        EnterpriseRouterRegionId: "region-abc",
        Description: &descriptionCentralNetworkErRouteTableAttachment,
        EnterpriseRouterTableId: "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
        CentralNetworkPlaneId: "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
        Name: "name",
```

```

AttachedErTableRegionId: "region-abc",
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](#).

4.8.6 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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

GET /v3/{domain_id}/gcn/central-network/{central_network_id}/er-route-table-attachments

Table 4-378 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
central_network_id	Yes	String	Central network ID.

Table 4-379 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 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.
sort_key	No	String	Field for sorting.
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 of arrays	Resource ID. Multiple IDs can be queried.
name	No	Array of strings	Resource name. Multiple names can be queried.
state	No	Array of arrays	Central network connection status. Multiple statuses can be queried.

Parameter	Mandatory	Type	Description
attachment_instance_id	No	Array of arrays	Attachment ID.

Request Parameters

Table 4-380 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-381 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
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.

Table 4-382 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Table 4-383 CentralNetworkErRouteTableAttachment

Parameter	Type	Description
id	String	Instance ID.

Parameter	Type	Description
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
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
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 connection bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global connection bandwidth. • TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.
bandwidth_size	Integer	Amount of bandwidth, 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 an enterprise router.
enterprise_router_attachment_id	String	Attachment ID of the enterprise router.
enterprise_router_table_id	String	ID of the enterprise router route table.
enterprise_router_site_code	String	Site code of the enterprise router on a central network.
attached_er_table_project_id	String	Project ID of an enterprise router added to a central network.
attached_er_table_region_id	String	Region ID of an enterprise router.
attached_er_id	String	ID of an enterprise router added to a central network.
attached_er_table_id	String	Route table ID of an enterprise router added to a central network.
attached_er_attachment_id	String	Attachment ID of an enterprise router added to a central network.
attached_er_table_site_code	String	Site code of an enterprise router added to a central network.

Parameter	Type	Description
hosted_cloud	String	Huawei Cloud or partner cloud. <ul style="list-style-type: none"> HWCloud: Huawei Cloud Ireland: partner cloud in Ireland
approved_state	String	Approval status. <ul style="list-style-type: none"> APPROVING: Approving APPROVED: Approved UNAPPROVED: Approval failed
reason	String	Reason for rejecting an enterprise router route table as an attachment.

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" : "region-abc",
    "enterprise_router_attachment_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "enterprise_router_table_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "enterprise_router_site_code" : "site-abc",
    "attached_er_table_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "attached_er_table_region_id" : "region-abc",
    "attached_er_table_project_id" : "XXX",
    "attached_er_table_site_code" : "site-abc",
    "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 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.withCentralNetworkId("{central_network_id}");
        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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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.central_network_id = "{central_network_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{}
    request.CentralNetworkId = "{central_network_id}"
    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](#).

4.8.7 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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

GET /v3/{domain_id}/gcn/central-network/{central_network_id}/er-route-table-attachments/{er_route_table_attachment_id}

Table 4-384 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
central_network_id	Yes	String	Central network ID.
er_route_table_attachment_id	Yes	String	ID of the enterprise router route table attachment on the central network.

Request Parameters

Table 4-385 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-386 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
central_network_er_route_table_attachment	CentralNetworkErRouteTableAttachment object	Details of the enterprise router route table used as an attachment.

Table 4-387 CentralNetworkErRouteTableAttachment

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
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.

Parameter	Type	Description
bandwidth_type	String	Bandwidth type. The bandwidth types are as follows: <ul style="list-style-type: none"> • BandwidthPackage: A global connection bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global connection bandwidth. • TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.
bandwidth_size	Integer	Amount of bandwidth, 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 an enterprise router.
enterprise_router_attachment_id	String	Attachment ID of the enterprise router.
enterprise_router_table_id	String	ID of the enterprise router route table.
enterprise_router_site_code	String	Site code of the enterprise router on a central network.
attached_er_table_project_id	String	Project ID of an enterprise router added to a central network.
attached_er_table_region_id	String	Region ID of an enterprise router.
attached_er_id	String	ID of an enterprise router added to a central network.
attached_er_table_id	String	Route table ID of an enterprise router added to a central network.
attached_er_attachment_id	String	Attachment ID of an enterprise router added to a central network.
attached_er_table_site_code	String	Site code of an enterprise router added to a central network.

Parameter	Type	Description
hosted_cloud	String	Huawei Cloud or partner cloud. <ul style="list-style-type: none"> HWCloud: Huawei Cloud Ireland: partner cloud in Ireland
approved_state	String	Approval status. <ul style="list-style-type: none"> APPROVING: Approving APPROVED: Approved UNAPPROVED: Approval failed
reason	String	Reason for rejecting an enterprise router route table as an attachment.

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": "region-abc",
    "enterprise_router_attachment_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "enterprise_router_table_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "enterprise_router_site_code": "site-abc",
    "attached_er_table_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "attached_er_table_region_id": "region-abc",
    "attached_er_table_project_id": "XXX",
    "attached_er_table_site_code": "site-abc",
    "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();  
        request.withCentralNetworkId("{central_network_id}");  
        request.withErRouteTableAttachmentId("{er_route_table_attachment_id}");  
        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.getStatusCode());  
            System.out.println(e.getRequestId());  
            System.out.println(e.getErrorCode());  
            System.out.println(e.getErrorMsg());  
        }  
    }  
}
```

Python

```
# coding: utf-8  
import os
```

```
from huaweicloudsdkcore.auth.credentials import 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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.central_network_id = "{central_network_id}"
        request.er_route_table_attachment_id = "{er_route_table_attachment_id}"
        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{}
    request.CentralNetworkId = "{central_network_id}"
    request.ErRouteTableAttachmentId = "{er_route_table_attachment_id}"
    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](#).

4.8.8 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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

PUT /v3/{domain_id}/gcn/central-network/{central_network_id}/er-route-table-attachments/{er_route_table_attachment_id}

Table 4-388 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
central_network_id	Yes	String	Central network ID.

Parameter	Mandatory	Type	Description
er_route_table_attachment_id	Yes	String	ID of the enterprise router route table attachment on the central network.

Request Parameters

Table 4-389 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Table 4-390 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 4-391 UpdateCentralNetworkErRouteTableAttachment

Parameter	Mandatory	Type	Description
name	No	String	Instance name.
description	No	String	Resource description. Angle brackets (<>) are not allowed.

Response Parameters

Status code: 200

Table 4-392 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
central_network_er_route_table_attachment	CentralNetworkErRouteTableAttachment object	Details of the enterprise router route table used as an attachment.

Table 4-393 CentralNetworkErRouteTableAttachment

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

Parameter	Type	Description
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 connection bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global connection bandwidth. • TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.
bandwidth_size	Integer	Amount of bandwidth, 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 an enterprise router.
enterprise_router_attachment_id	String	Attachment ID of the enterprise router.
enterprise_router_table_id	String	ID of the enterprise router route table.
enterprise_router_site_code	String	Site code of the enterprise router on a central network.
attached_er_table_project_id	String	Project ID of an enterprise router added to a central network.
attached_er_table_region_id	String	Region ID of an enterprise router.
attached_er_id	String	ID of an enterprise router added to a central network.
attached_er_table_id	String	Route table ID of an enterprise router added to a central network.
attached_er_attachment_id	String	Attachment ID of an enterprise router added to a central network.

Parameter	Type	Description
attached_er_table_site_code	String	Site code of an enterprise router added to a central network.
hosted_cloud	String	Huawei Cloud or partner cloud. <ul style="list-style-type: none"> HWCloud: Huawei Cloud Ireland: partner cloud in Ireland
approved_state	String	Approval status. <ul style="list-style-type: none"> APPROVING: Approving APPROVED: Approved UNAPPROVED: Approval failed
reason	String	Reason for rejecting an enterprise router route table as an attachment.

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" : "region-abc",
    "enterprise_router_attachment_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "enterprise_router_table_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "enterprise_router_site_code" : "site-abc",
  }
}
```



```
"attached_er_table_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
"attached_er_table_region_id" : "region-abc",
"attached_er_table_project_id" : "XXX",
"attached_er_table_site_code" : "site-abc",
"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();
        request.withCentralNetworkId("{central_network_id}");
        request.withErRouteTableAttachmentId("{er_route_table_attachment_id}");
        UpdateCentralNetworkErRouteTableAttachmentRequestBody body = new
        UpdateCentralNetworkErRouteTableAttachmentRequestBody();
        UpdateCentralNetworkErRouteTableAttachment centralNetworkErRouteTableAttachmentbody = 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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.central_network_id = "{central_network_id}"
        request.er_route_table_attachment_id = "{er_route_table_attachment_id}"
        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{}
    request.CentralNetworkId = "{central_network_id}"
    request.ErRouteTableAttachmentId = "{er_route_table_attachment_id}"
    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](#).

4.8.9 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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

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.
central_network_id	Yes	String	Central network ID.

Table 4-395 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 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.
sort_key	No	String	Field for sorting.
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 of arrays	Resource ID. Multiple IDs can be queried.
name	No	Array of strings	Resource name. Multiple names can be queried.
attachment_instance_type	No	Array of arrays	Attachment type. Multiple attachment types can be queried.
state	No	Array of arrays	Central network connection status. Multiple statuses can be queried.
attachment_instance_id	No	Array of arrays	Attachment ID.

Request Parameters

Table 4-396 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-397 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
page_info	PageInfo object	Pagination query information.
central_network_attachments	Array of CentralNetworkAttachment objects	List of connections on the central network.

Table 4-398 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Table 4-399 CentralNetworkAttachment

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
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.

Parameter	Type	Description
bandwidth_type	String	Bandwidth type. The bandwidth types are as follows: <ul style="list-style-type: none"> • BandwidthPackage: A global connection bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global connection bandwidth. • TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.
bandwidth_size	Integer	Amount of bandwidth, 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 an 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.

Parameter	Type	Description
enterprise_router_site_code	String	Site code of the enterprise router on a central network.
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.
attachment_parent_instance_id	String	ID of the parent resource of an attachment. Here it is the ID of the enterprise router.
hosted_cloud	String	Huawei Cloud or partner cloud. <ul style="list-style-type: none"> • HWCloud: Huawei Cloud • Ireland: partner cloud in Ireland
approved_state	String	Approval status. <ul style="list-style-type: none"> • APPROVING: Approving • APPROVED: Approved • UNAPPROVED: Approval failed
reason	String	Reason for rejecting attachment creation.

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" : "region-abc",
"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" : "region-abc",
"attachment_instance_site_code" : "site-abc",
"enterprise_router_site_code" : "site-abc",
"specification_value" : {
  "enterprise_router_table_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 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.withCentralNetworkId("{central_network_id}");
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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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.central_network_id = "{central_network_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{}
    request.CentralNetworkId = "{central_network_id}"
    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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

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.
central_network_id	Yes	String	Central network ID.
attachment_id	Yes	String	ID of the attachment on the central network.

Request Parameters

Table 4-402 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 202

Table 4-403 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
central_network_attachment	CentralNetworkAttachment object	Details of the attachment on the central network.

Table 4-404 CentralNetworkAttachment

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.

Parameter	Type	Description
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 connection bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global connection bandwidth.• TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.
bandwidth_size	Integer	Amount of bandwidth, 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 an 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.

Parameter	Type	Description
enterprise_router_site_code	String	Site code of the enterprise router on a central network.
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.
attachment_parent_instance_id	String	ID of the parent resource of an attachment. Here it is the ID of the enterprise router.
hosted_cloud	String	Huawei Cloud or partner cloud. <ul style="list-style-type: none"> HWCloud: Huawei Cloud Ireland: partner cloud in Ireland
approved_state	String	Approval status. <ul style="list-style-type: none"> APPROVING: Approving APPROVED: Approved UNAPPROVED: Approval failed
reason	String	Reason for rejecting attachment creation.

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" : "region-abc",
"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" : "region-abc",
"attachment_instance_site_code" : "site-abc",
"enterprise_router_site_code" : "site-abc",
"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"
}
}
```

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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

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.
central_network_id	Yes	String	Central network ID.

Table 4-407 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 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.
sort_key	No	String	Field for sorting.
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 of arrays	Resource ID. Multiple IDs can be queried.
name	No	Array of strings	Resource name. Multiple names can be queried.

Parameter	Mandatory	Type	Description
state	No	Array of arrays	Central network connection status. Multiple statuses can be queried.
global_connection_bandwidth_id	No	Array of arrays	Bandwidth package IDs.
bandwidth_type	No	Object	Bandwidth type. The bandwidth types are as follows: <ul style="list-style-type: none"> • BandwidthPackage: A global connection bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global connection 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.

Response Parameters

Status code: 200

Table 4-409 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
page_info	PageInfo object	Pagination query information.
central_network_connections	Array of CentralNetworkConnection objects	List of the central network connections.

Table 4-410 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Table 4-411 CentralNetworkConnection

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
domain_id	String	ID of the account that the instance belongs to.
enterprise_project_id	String	ID of the enterprise project that the resource belongs to.
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 connection bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global connection bandwidth. • TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.
bandwidth_size	Integer	Amount of bandwidth, 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.
is_frozen	Boolean	Whether the resource is frozen.

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.
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	Instance ID.
project_id	String	Project ID.
region_id	String	Region ID.
site_code	String	Site code.
instance_id	String	Instance ID at an end of a connection.
parent_instance_id	String	Parent resource ID of the instance at an end of a connection.
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": "region-abc",
      "site_code": "region-abc",
      "instance_id": "d238dd85-f769-485b-aa05-d20e1d3889df",
      "type": "ER"
    }, {
      "id": "8641d7f0-bd0c-49fe-8b70-3649cd7dd9b1",
      "project_id": "XXX",
      "region_id": "region-abc",
      "site_code": "region-abc",
      "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.*;
```

```
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.withCentralNetworkId("{central_network_id}");
        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

import os
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 = os.getenv("CLOUD_SDK_AK")
    sk = 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.central_network_id = "{central_network_id}"
        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{}
    request.CentralNetworkId = "{central_network_id}"
    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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

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.
central_network_id	Yes	String	Central network ID.
connection_id	Yes	String	ID of the connection on the central network.

Request Parameters

Table 4-414 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

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 connection bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global connection 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.

Parameter	Mandatory	Type	Description
bandwidth_size	No	Integer	Amount of bandwidth, in Mbit/s.

Response Parameters

Status code: 202

Table 4-417 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
central_network_connection	CentralNetworkConnection object	Connection on the central network.

Table 4-418 CentralNetworkConnection

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
domain_id	String	ID of the account that the instance belongs to.
enterprise_project_id	String	ID of the enterprise project that the resource belongs to.
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 connection bandwidth billed by fixed bandwidth is required, and cross-site connection bandwidths are assigned from the global connection bandwidth. • TestBandwidth: The test bandwidth is free. Only the minimum bandwidth is used for testing cross-region connectivity.
bandwidth_size	Integer	Amount of bandwidth, 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.
is_frozen	Boolean	Whether the resource is frozen.

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.
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	Instance ID.
project_id	String	Project ID.
region_id	String	Region ID.
site_code	String	Site code.
instance_id	String	Instance ID at an end of a connection.
parent_instance_id	String	Parent resource ID of the instance at an end of a connection.
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 cross-site connection on a central network

```
PUT /v3/{domain_id}/gcn/central-network/{central_network_id}/connections/{connection_id}
{
  "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" : "region-abc",
      "site_code" : "region-abc",
      "instance_id" : "d238dd85-f769-485b-aa05-d20e1d3889df",
      "type" : "ER"
    }, {
      "id" : "8641d7f0-bd0c-49fe-8b70-3649cd7dd9b1",
      "project_id" : "XXX",
      "region_id" : "region-abc",
      "site_code" : "region-abc",
      "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

Updating a cross-site connection 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 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();
        request.withCentralNetworkId("{central_network_id}");
        request.withConnectionId("{connection_id}");
        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

Updating a cross-site connection on a central network

```
# coding: utf-8

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.central_network_id = "{central_network_id}"
        request.connection_id = "{connection_id}"
        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

Updating a cross-site connection 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.UpdateCentralNetworkConnectionRequest{}  
request.CentralNetworkId = "{central_network_id}"  
request.ConnectionId = "{connection_id}"  
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 Site Network Management

4.10.1 Creating a P2P Site Network

Function

This API is used to create a P2P site network.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

POST /v3/{domain_id}/dcaas/p2p-site-networks

Table 4-420 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-421 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Table 4-422 Request body parameters

Parameter	Mandatory	Type	Description
p2p_site_network	Yes	CreateP2PSiteNetwork object	Request body for creating a P2P site network.

Table 4-423 CreateP2PSiteNetwork

Parameter	Mandatory	Type	Description
name	Yes	String	Instance name.
description	No	String	Resource description. Angle brackets (<>) are not allowed.
tags	No	Array of Tag objects	Resource tags.
enterprise_project_id	No	String	ID of the enterprise project that the resource belongs to.
sites	Yes	Array of CreateSiteInformation objects	Definition of the two ends of a site-to-site connection on an end-to-end (P2P) site network. The length is fixed to an array of 2.

Table 4-424 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 4-425 CreateSiteInformation

Parameter	Mandatory	Type	Description
region_id	Yes	String	Region ID.
project_id	Yes	String	Project ID.
gateway_type	Yes	String	Gateway type. GDGW indicates global DC gateways.
gateway_id	Yes	String	Gateway ID.

Response Parameters

Status code: 202

Table 4-426 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
site_network	SiteNetworkEntry object	Site network.

Table 4-427 SiteNetworkEntry

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

Parameter	Type	Description
description	String	Resource description. Angle brackets (<>) are not allowed.
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	Site network status. <ul style="list-style-type: none"> ● AVAILABLE: The site network is available. ● UPDATING: The site network is being updated. ● FAILED: The site network failed. ● CREATING: The site network is being created. ● DELETING: The site network is being deleted. ● DELETED: The site network is deleted. ● NON-COMPLETE: The configuration is incomplete. ● RESTORING: The site network is being restored.
enterprise_project_id	String	ID of the enterprise project that the resource belongs to.
apply_policy_id	String	Policy ID.
tags	Array of Tag objects	Resource tags.
topology	String	Site network topology. <ul style="list-style-type: none"> ● p2p: point-to-point topology ● mesh: mesh topology ● star: star topology ● hybrid: hybrid topology
connections	Array of SiteConnection objects	List of site-to-site connections.

Parameter	Type	Description
sites	Array of SiteInformation objects	A node in a point-to-point or mesh topology.
hub_site	SiteInformation object	Site information.
spoke_sites	Array of SiteInformation objects	Site list.

Table 4-428 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 4-429 SiteConnection

Parameter	Type	Description
id	String	Instance ID.
site_network_id	String	Site network ID.

Parameter	Type	Description
state	String	<p>Site-to-site 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 connection failed. • FREEZED: The connection is frozen. • DELETED: The connection is deleted.
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.
edge_pair	Array of DirectedEdge objects	Definition of the two ends of a site-to-site connection. The length is fixed to an array of 2.
cross_region_type	String	<p>Communications within a region or between regions.</p> <ul style="list-style-type: none"> • intra-region: communications within a region • inter-region: communications between regions
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Amount of bandwidth, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.

Parameter	Type	Description
frozen_effect	String	Resource frozen effect. <ul style="list-style-type: none"> RELEASABLE: The resource is frozen and can be released. UNRELEASABLE: The resource is frozen and cannot be released.
is_bind_bandwidth	Boolean	Whether a bandwidth package is bound.

Table 4-430 DirectedEdge

Parameter	Type	Description
id	String	Instance ID.
region_id	String	Region ID.
gateway_id	String	Gateway ID.
gateway_type	String	Gateway type. GDGW indicates global DC gateways.
site_code	String	Site code.
project_id	String	Project ID.

Table 4-431 SiteInformation

Parameter	Type	Description
region_id	String	Region ID.
project_id	String	Project ID.
gateway_type	String	Gateway type. GDGW indicates global DC gateways.
gateway_id	String	Gateway ID.
site_code	String	Site code.
asn	Long	ASN of the network instance when BGP is used for routing.

Example Requests

Creating a P2P site network

```
POST /v3/{domain_id}/dcaas/p2p-site-networks
```



```
{
  "p2p_site_network" : {
    "name" : "name",
    "description" : "description",
    "sites" : [ {
      "gateway_id" : "1c233723-234c-4b50-8fba-7072b4c6aa1a",
      "project_id" : "XXX",
      "region_id" : "region-abc",
      "gateway_type" : "GDGW"
    }, {
      "gateway_id" : "8641d7f0-bd0c-49fe-8b70-3649cd7dd9b1",
      "project_id" : "XXX",
      "region_id" : "region-abc",
      "gateway_type" : "GDGW"
    } ]
  }
}
```

Example Responses

Status code: 202

The P2P site network has been created.

```
{
  "request_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "site_network" : {
    "id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "name" : "name",
    "description" : "description",
    "domain_id" : "XXX",
    "state" : "CREATING",
    "created_at" : "2023-10-09T10:15:32.134Z",
    "updated_at" : "2023-10-09T10:15:32.134Z",
    "enterprise_project_id" : "0",
    "apply_policy_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "topology" : "p2p",
    "connections" : [ ]
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Creating a P2P site 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 CreateP2PSiteNetworkSolution {

    public static void main(String[] args) {
```

```
// The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_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();

CreateP2PSiteNetworkRequest request = new CreateP2PSiteNetworkRequest();
CreateP2PSiteNetworkRequestBody body = new CreateP2PSiteNetworkRequestBody();
List<CreateSiteInformation> listP2pSiteNetworkSites = new ArrayList<>();
listP2pSiteNetworkSites.add(
    new CreateSiteInformation()
        .withRegionId("region-abc")
        .withGatewayType(CreateSiteInformation.GatewayTypeEnum.fromValue("GDGW"))
        .withProjectId("XXX")
        .withGatewayId("1c233723-234c-4b50-8fba-7072b4c6aa1a")
);
listP2pSiteNetworkSites.add(
    new CreateSiteInformation()
        .withRegionId("region-abc")
        .withGatewayType(CreateSiteInformation.GatewayTypeEnum.fromValue("GDGW"))
        .withProjectId("XXX")
        .withGatewayId("8641d7f0-bd0c-49fe-8b70-3649cd7dd9b1")
);
CreateP2PSiteNetwork p2pSiteNetworkbody = new CreateP2PSiteNetwork();
p2pSiteNetworkbody.setName("name")
    .withDescription("description")
    .withSites(listP2pSiteNetworkSites);
body.withP2pSiteNetwork(p2pSiteNetworkbody);
request.withBody(body);
try {
    CreateP2PSiteNetworkResponse response = client.createP2PSiteNetwork(request);
    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 P2P site network

```
# coding: utf-8

import os
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 = os.environ["CLOUD_SDK_AK"]
sk = os.environ["CLOUD_SDK_SK"]

credentials = GlobalCredentials(ak, sk)

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

try:
    request = CreateP2PSiteNetworkRequest()
    listSitesP2pSiteNetwork = [
        CreateSiteInformation(
            region_id="region-abc",
            gateway_type="GDGW",
            project_id="XXX",
            gateway_id="1c233723-234c-4b50-8fba-7072b4c6aa1a"
        ),
        CreateSiteInformation(
            region_id="region-abc",
            gateway_type="GDGW",
            project_id="XXX",
            gateway_id="8641d7f0-bd0c-49fe-8b70-3649cd7dd9b1"
        )
    ]
    p2pSiteNetworkbody = CreateP2PSiteNetwork(
        name="name",
        description="description",
        sites=listSitesP2pSiteNetwork
    )
    request.body = CreateP2PSiteNetworkRequestBody(
        p2p_site_network=p2pSiteNetworkbody
    )
    response = client.create_p2_p_site_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 P2P site 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.CreateP2PSiteNetworkRequest{
gatewayTypeSites:= model.GetCreateSiteInformationGatewayTypeEnum().GDGW
gatewayTypeSites1:= model.GetCreateSiteInformationGatewayTypeEnum().GDGW
var listSitesP2pSiteNetwork = []model.CreateSiteInformation{
    {
        RegionId: "region-abc",
        GatewayType: &gatewayTypeSites,
        ProjectId: "XXX",
        GatewayId: "1c233723-234c-4b50-8fba-7072b4c6aa1a",
    },
    {
        RegionId: "region-abc",
        GatewayType: &gatewayTypeSites1,
        ProjectId: "XXX",
        GatewayId: "8641d7f0-bd0c-49fe-8b70-3649cd7dd9b1",
    },
}
descriptionP2pSiteNetwork:= "description"
p2pSiteNetworkbody := &model.CreateP2PSiteNetwork{
    Name: "name",
    Description: &descriptionP2pSiteNetwork,
    Sites: listSitesP2pSiteNetwork,
}
request.Body = &model.CreateP2PSiteNetworkRequestBody{
    P2pSiteNetwork: p2pSiteNetworkbody,
}
response, err := client.CreateP2PSiteNetwork(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 P2P site network has been created.

Error Codes

See [Error Codes](#).

4.10.2 Querying the Site Network List

Function

This API is used to query the site 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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

GET /v3/{domain_id}/dcaas/site-networks

Table 4-432 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-433 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 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.
sort_key	No	String	Field for sorting.

Parameter	Mandatory	Type	Description
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 of arrays	Resource ID. Multiple IDs can be queried.
name	No	Array of strings	Resource name. Multiple names can be queried.
state	No	Array of arrays	Resource status. Multiple statuses can be queried.
enterprise_project_id	No	Array of strings	Enterprise project IDs.
global_dc_gateway_id	No	Array of arrays	Global DC gateway IDs.
global_connection_bandwidth_id	No	Array of arrays	Bandwidth package IDs.
connection_id	No	Array of arrays	Site-to-site connection ID.

Request Parameters

Table 4-434 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-435 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
page_info	PageInfo object	Pagination query information.

Parameter	Type	Description
site_networks	Array of SiteNetworkEntry objects	Site network list.

Table 4-436 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Table 4-437 SiteNetworkEntry

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
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	Site network status. <ul style="list-style-type: none"> • AVAILABLE: The site network is available. • UPDATING: The site network is being updated. • FAILED: The site network failed. • CREATING: The site network is being created. • DELETING: The site network is being deleted. • DELETED: The site network is deleted. • NON-COMPLETE: The configuration is incomplete. • RESTORING: The site network is being restored.
enterprise_project_id	String	ID of the enterprise project that the resource belongs to.
apply_policy_id	String	Policy ID.
tags	Array of Tag objects	Resource tags.
topology	String	Site network topology. <ul style="list-style-type: none"> • p2p: point-to-point topology • mesh: mesh topology • star: star topology • hybrid: hybrid topology
connections	Array of SiteConnection objects	List of site-to-site connections.
sites	Array of SiteInformation objects	A node in a point-to-point or mesh topology.
hub_site	SiteInformation object	Site information.
spoke_sites	Array of SiteInformation objects	Site list.

Table 4-438 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 4-439 SiteConnection

Parameter	Type	Description
id	String	Instance ID.
site_network_id	String	Site network ID.
state	String	<p>Site-to-site 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 connection failed. • FREEZED: The connection is frozen. • DELETED: The connection is deleted.
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
edge_pair	Array of DirectedEdge objects	Definition of the two ends of a site-to-site connection. The length is fixed to an array of 2.
cross_region_type	String	Communications within a region or between regions. <ul style="list-style-type: none"> • intra-region: communications within a region • inter-region: communications between regions
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Amount of bandwidth, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.
frozen_effect	String	Resource frozen effect. <ul style="list-style-type: none"> • RELEASABLE: The resource is frozen and can be released. • UNRELEASABLE: The resource is frozen and cannot be released.
is_bind_bandwidth	Boolean	Whether a bandwidth package is bound.

Table 4-440 DirectedEdge

Parameter	Type	Description
id	String	Instance ID.
region_id	String	Region ID.
gateway_id	String	Gateway ID.
gateway_type	String	Gateway type. GDGW indicates global DC gateways.
site_code	String	Site code.
project_id	String	Project ID.

Table 4-441 SiteInformation

Parameter	Type	Description
region_id	String	Region ID.

Parameter	Type	Description
project_id	String	Project ID.
gateway_type	String	Gateway type. GDGW indicates global DC gateways.
gateway_id	String	Gateway ID.
site_code	String	Site code.
asn	Long	ASN of the network instance when BGP is used for routing.

Example Requests

Querying the site network list

```
GET /v3/{domain_id}/dcaas/site-networks
```

Example Responses

Status code: 200

The site network list has been queried.

```
{
  "request_id": "0050ea65af7e190d9a791d9e69f28e63",
  "page_info": {
    "current_count": 1
  },
  "site_networks": [ {
    "id": "eb350a5c-06c1-4b12-9ae4-3820f31faaa0",
    "name": "er-connection",
    "domain_id": "XXX",
    "created_at": "2023-10-09T10:15:32.134Z",
    "updated_at": "2023-10-09T10:15:32.134Z",
    "enterprise_project_id": "0",
    "apply_policy_id": "43ad756e-2780-463e-a8ed-27a5bd77b7a7",
    "topology": "p2p",
    "state": "AVAILABLE",
    "sites": [ {
      "gateway_id": "1c233723-234c-4b50-8fba-7072b4c6aa1a",
      "project_id": "XXX",
      "region_id": "region-abc",
      "site_code": "region-abc",
      "gateway_type": "GDGW"
    }, {
      "gateway_id": "8641d7f0-bd0c-49fe-8b70-3649cd7dd9b1",
      "project_id": "XXX",
      "region_id": "region-abc",
      "site_code": "region-abc",
      "gateway_type": "GDGW"
    }
  ],
  "connections": [ {
    "id": "1c233723-234c-4b50-8fba-7072b4c6aa1a",
    "state": "AVAILABLE",
    "cross_region_type": "inter-region",
    "global_connection_bandwidth_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "bandwidth_size": 20,
    "is_frozen": false,
    "is_bind_bandwidth": false,
  }
  ]
}
```

```
"edge_pair" : [ {
  "id" : "1c233723-234c-4b50-8fba-7072b4c6aa1a",
  "gateway_id" : "8641d7f0-bd0c-49fe-8b70-3649cd7dd9b1",
  "project_id" : "XXX",
  "region_id" : "region-abc",
  "site_code" : "region-abc",
  "gateway_type" : "GDGW"
}, {
  "id" : "1c233723-234c-4b50-8fba-7072b4c6aa11",
  "gateway_id" : "8641d7f0-bd0c-49fe-8b70-3649cd7dd9b1",
  "project_id" : "XXX",
  "region_id" : "region-abc",
  "site_code" : "region-abc",
  "gateway_type" : "GDGW"
}]
}]
}]
}
```

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 ListSiteNetworksSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_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();
        ListSiteNetworksRequest request = new ListSiteNetworksRequest();
        try {
            ListSiteNetworksResponse response = client.listSiteNetworks(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
        }
    }
}
```

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

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import 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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListSiteNetworksRequest()
        response = client.list_site_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.ListSiteNetworksRequest{}
response, err := client.ListSiteNetworks(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 network list has been queried.

Error Codes

See [Error Codes](#).

4.10.3 Querying a Site Network

Function

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

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

GET /v3/{domain_id}/dcaas/site-networks/{site_network_id}

Table 4-442 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
site_network_id	Yes	String	Site network ID.

Request Parameters

Table 4-443 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200**Table 4-444** Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
site_network	SiteNetworkEntry object	Site network.

Table 4-445 SiteNetworkEntry

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
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	Site network status. <ul style="list-style-type: none"> • AVAILABLE: The site network is available. • UPDATING: The site network is being updated. • FAILED: The site network failed. • CREATING: The site network is being created. • DELETING: The site network is being deleted. • DELETED: The site network is deleted. • NON-COMPLETE: The configuration is incomplete. • RESTORING: The site network is being restored.
enterprise_project_id	String	ID of the enterprise project that the resource belongs to.
apply_policy_id	String	Policy ID.
tags	Array of Tag objects	Resource tags.
topology	String	Site network topology. <ul style="list-style-type: none"> • p2p: point-to-point topology • mesh: mesh topology • star: star topology • hybrid: hybrid topology
connections	Array of SiteConnection objects	List of site-to-site connections.
sites	Array of SiteInformation objects	A node in a point-to-point or mesh topology.
hub_site	SiteInformation object	Site information.
spoke_sites	Array of SiteInformation objects	Site list.

Table 4-446 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 4-447 SiteConnection

Parameter	Type	Description
id	String	Instance ID.
site_network_id	String	Site network ID.
state	String	Site-to-site 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 connection failed. • FREEZED: The connection is frozen. • DELETED: The connection is deleted.
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
edge_pair	Array of DirectedEdge objects	Definition of the two ends of a site-to-site connection. The length is fixed to an array of 2.
cross_region_type	String	Communications within a region or between regions. <ul style="list-style-type: none"> • intra-region: communications within a region • inter-region: communications between regions
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Amount of bandwidth, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.
frozen_effect	String	Resource frozen effect. <ul style="list-style-type: none"> • RELEASABLE: The resource is frozen and can be released. • UNRELEASABLE: The resource is frozen and cannot be released.
is_bind_bandwidth	Boolean	Whether a bandwidth package is bound.

Table 4-448 DirectedEdge

Parameter	Type	Description
id	String	Instance ID.
region_id	String	Region ID.
gateway_id	String	Gateway ID.
gateway_type	String	Gateway type. GDGW indicates global DC gateways.
site_code	String	Site code.
project_id	String	Project ID.

Table 4-449 SiteInformation

Parameter	Type	Description
region_id	String	Region ID.

Parameter	Type	Description
project_id	String	Project ID.
gateway_type	String	Gateway type. GDGW indicates global DC gateways.
gateway_id	String	Gateway ID.
site_code	String	Site code.
asn	Long	ASN of the network instance when BGP is used for routing.

Example Requests

Querying a site network

```
GET /v3/{domain_id}/dcaas/site-networks/{site_network_id}
```

Example Responses

Status code: 200

Details of the site network have been queried.

```
{
  "request_id": "0050ea65af7e190d9a791d9e69f28e63",
  "site_network": {
    "id": "eb350a5c-06c1-4b12-9ae4-3820f31faaa0",
    "name": "er-connection",
    "domain_id": "XXX",
    "created_at": "2023-10-09T10:15:32.134Z",
    "updated_at": "2023-10-09T10:15:32.134Z",
    "enterprise_project_id": "0",
    "apply_policy_id": "43ad756e-2780-463e-a8ed-27a5bd77b7a7",
    "topology": "p2p",
    "state": "AVAILABLE",
    "sites": [ {
      "gateway_id": "1c233723-234c-4b50-8fba-7072b4c6aa1a",
      "project_id": "XXX",
      "region_id": "region-abc",
      "site_code": "region-abc",
      "gateway_type": "GDGW"
    }, {
      "gateway_id": "8641d7f0-bd0c-49fe-8b70-3649cd7dd9b1",
      "project_id": "XXX",
      "region_id": "region-abc",
      "site_code": "region-abc",
      "gateway_type": "GDGW"
    } ],
    "connections": [ {
      "id": "1c233723-234c-4b50-8fba-7072b4c6aa1a",
      "state": "AVAILABLE",
      "cross_region_type": "inter-region",
      "global_connection_bandwidth_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
      "bandwidth_size": 20,
      "is_frozen": false,
      "is_bind_bandwidth": false,
      "edge_pair": [ {
        "id": "1c233723-234c-4b50-8fba-7072b4c6aa1a",
        "gateway_id": "8641d7f0-bd0c-49fe-8b70-3649cd7dd9b1",

```

```
"project_id" : "XXX",
"region_id" : "region-abc",
"site_code" : "region-abc",
"gateway_type" : "GDGW"
}, {
  "id" : "1c233723-234c-4b50-8fba-7072b4c6aa11",
  "gateway_id" : "8641d7f0-bd0c-49fe-8b70-3649cd7dd9b1",
  "project_id" : "XXX",
  "region_id" : "region-abc",
  "site_code" : "region-abc",
  "gateway_type" : "GDGW"
}]
}]
}
```

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 ShowSiteNetworkSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_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();
        ShowSiteNetworkRequest request = new ShowSiteNetworkRequest();
        request.withSiteNetworkId("{site_network_id}");
        try {
            ShowSiteNetworkResponse response = client.showSiteNetwork(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

```
}  
}  
}
```

Python

```
# coding: utf-8  
  
import os  
from huaweicloudsdkcore.auth.credentials import 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 = os.environ["CLOUD_SDK_AK"]  
    sk = os.environ["CLOUD_SDK_SK"]  
  
    credentials = GlobalCredentials(ak, sk)  
  
    client = CcClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(CcRegion.value_of("<YOUR REGION>")) \  
        .build()  
  
    try:  
        request = ShowSiteNetworkRequest()  
        request.site_network_id = "{site_network_id}"  
        response = client.show_site_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.ShowSiteNetworkRequest{}
    request.SiteNetworkId = "{site_network_id}"
    response, err := client.ShowSiteNetwork(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	Details of the site network have been queried.

Error Codes

See [Error Codes](#).

4.10.4 Updating a Site Network

Function

This API is used to update a site network.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

PUT /v3/{domain_id}/dcaas/site-networks/{site_network_id}

Table 4-450 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
site_network_id	Yes	String	Site network ID.

Request Parameters

Table 4-451 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Table 4-452 Request body parameters

Parameter	Mandatory	Type	Description
site_network	Yes	UpdateSiteNetwork object	Details of the site network to be updated.

Table 4-453 UpdateSiteNetwork

Parameter	Mandatory	Type	Description
name	No	String	Instance name.
description	No	String	Resource description. Angle brackets (<>) are not allowed.
tags	No	Array of Tag objects	Resource tags.

Table 4-454 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 4-455 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
site_network	SiteNetworkEntry object	Site network.

Table 4-456 SiteNetworkEntry

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
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	Site network status. <ul style="list-style-type: none"> • AVAILABLE: The site network is available. • UPDATING: The site network is being updated. • FAILED: The site network failed. • CREATING: The site network is being created. • DELETING: The site network is being deleted. • DELETED: The site network is deleted. • NON-COMPLETE: The configuration is incomplete. • RESTORING: The site network is being restored.
enterprise_project_id	String	ID of the enterprise project that the resource belongs to.
apply_policy_id	String	Policy ID.

Parameter	Type	Description
tags	Array of Tag objects	Resource tags.
topology	String	Site network topology. <ul style="list-style-type: none"> • p2p: point-to-point topology • mesh: mesh topology • star: star topology • hybrid: hybrid topology
connections	Array of SiteConnection objects	List of site-to-site connections.
sites	Array of SiteInformation objects	A node in a point-to-point or mesh topology.
hub_site	SiteInformation object	Site information.
spoke_sites	Array of SiteInformation objects	Site list.

Table 4-457 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 4-458 SiteConnection

Parameter	Type	Description
id	String	Instance ID.
site_network_id	String	Site network ID.

Parameter	Type	Description
state	String	<p>Site-to-site 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 connection failed. • FREEZED: The connection is frozen. • DELETED: The connection is deleted.
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.
edge_pair	Array of DirectedEdge objects	Definition of the two ends of a site-to-site connection. The length is fixed to an array of 2.
cross_region_type	String	<p>Communications within a region or between regions.</p> <ul style="list-style-type: none"> • intra-region: communications within a region • inter-region: communications between regions
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Amount of bandwidth, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.

Parameter	Type	Description
frozen_effect	String	Resource frozen effect. <ul style="list-style-type: none"> • RELEASABLE: The resource is frozen and can be released. • UNRELEASABLE: The resource is frozen and cannot be released.
is_bind_bandwidth	Boolean	Whether a bandwidth package is bound.

Table 4-459 DirectedEdge

Parameter	Type	Description
id	String	Instance ID.
region_id	String	Region ID.
gateway_id	String	Gateway ID.
gateway_type	String	Gateway type. GDGW indicates global DC gateways.
site_code	String	Site code.
project_id	String	Project ID.

Table 4-460 SiteInformation

Parameter	Type	Description
region_id	String	Region ID.
project_id	String	Project ID.
gateway_type	String	Gateway type. GDGW indicates global DC gateways.
gateway_id	String	Gateway ID.
site_code	String	Site code.
asn	Long	ASN of the network instance when BGP is used for routing.

Example Requests

Updating a site network

```
PUT /v3/{domain_id}/dcaas/site-networks/{site_network_id}
```

```
{
  "site_network" : {
    "name" : "name"
  }
}
```

Example Responses

Status code: 200

The site network has been updated.

```
{
  "request_id" : "0050ea65af7e190d9a791d9e69f28e63",
  "site_network" : {
    "id" : "eb350a5c-06c1-4b12-9ae4-3820f31faaa0",
    "name" : "er-connection",
    "domain_id" : "XXX",
    "created_at" : "2023-10-09T10:15:32.134Z",
    "updated_at" : "2023-10-09T10:15:32.134Z",
    "enterprise_project_id" : "0",
    "apply_policy_id" : "43ad756e-2780-463e-a8ed-27a5bd77b7a7",
    "topology" : "p2p",
    "state" : "AVAILABLE",
    "sites" : [ {
      "gateway_id" : "1c233723-234c-4b50-8fba-7072b4c6aa1a",
      "project_id" : "XXX",
      "region_id" : "region-abc",
      "site_code" : "region-abc",
      "gateway_type" : "GDGW"
    }, {
      "gateway_id" : "8641d7f0-bd0c-49fe-8b70-3649cd7dd9b1",
      "project_id" : "XXX",
      "region_id" : "region-abc",
      "site_code" : "region-abc",
      "gateway_type" : "GDGW"
    } ],
    "connections" : [ {
      "id" : "1c233723-234c-4b50-8fba-7072b4c6aa1a",
      "state" : "AVAILABLE",
      "cross_region_type" : "inter-region",
      "global_connection_bandwidth_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
      "bandwidth_size" : 20,
      "is_frozen" : false,
      "is_bind_bandwidth" : false,
      "edge_pair" : [ {
        "id" : "1c233723-234c-4b50-8fba-7072b4c6aa1a",
        "gateway_id" : "8641d7f0-bd0c-49fe-8b70-3649cd7dd9b1",
        "project_id" : "XXX",
        "region_id" : "region-abc",
        "site_code" : "region-abc",
        "gateway_type" : "GDGW"
      }, {
        "id" : "1c233723-234c-4b50-8fba-7072b4c6aa11",
        "gateway_id" : "8641d7f0-bd0c-49fe-8b70-3649cd7dd9b1",
        "project_id" : "XXX",
        "region_id" : "region-abc",
        "site_code" : "region-abc",
        "gateway_type" : "GDGW"
      } ]
    } ]
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Updating a site 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 UpdateSiteNetworkSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_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();
        UpdateSiteNetworkRequest request = new UpdateSiteNetworkRequest();
        request.withSiteNetworkId("{site_network_id}");
        UpdateSiteNetworkRequestBody body = new UpdateSiteNetworkRequestBody();
        UpdateSiteNetwork siteNetworkbody = new UpdateSiteNetwork();
        siteNetworkbody.withName("name");
        body.withSiteNetwork(siteNetworkbody);
        request.withBody(body);
        try {
            UpdateSiteNetworkResponse response = client.updateSiteNetwork(request);
            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 site network

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = UpdateSiteNetworkRequest()
        request.site_network_id = "{site_network_id}"
        siteNetworkbody = UpdateSiteNetwork(
            name="name"
        )
        request.body = UpdateSiteNetworkRequestBody(
            site_network=siteNetworkbody
        )
        response = client.update_site_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 site 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.UpdateSiteNetworkRequest{}
request.SiteNetworkId = "{site_network_id}"
nameSiteNetwork:= "name"
siteNetworkbody := &model.UpdateSiteNetwork{
    Name: &nameSiteNetwork,
}
request.Body = &model.UpdateSiteNetworkRequestBody{
    SiteNetwork: siteNetworkbody,
}
response, err := client.UpdateSiteNetwork(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 network has been updated.

Error Codes

See [Error Codes](#).

4.10.5 Deleting a Site Network

Function

This API is used to delete a site network.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

DELETE /v3/{domain_id}/dcaas/site-networks/{site_network_id}

Table 4-461 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Parameter	Mandatory	Type	Description
site_network_id	Yes	String	Site network ID.

Request Parameters

Table 4-462 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 202

Table 4-463 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
site_network	SiteNetworkEntry object	Site network.

Table 4-464 SiteNetworkEntry

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
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	Site network status. <ul style="list-style-type: none"> • AVAILABLE: The site network is available. • UPDATING: The site network is being updated. • FAILED: The site network failed. • CREATING: The site network is being created. • DELETING: The site network is being deleted. • DELETED: The site network is deleted. • NON-COMPLETE: The configuration is incomplete. • RESTORING: The site network is being restored.
enterprise_project_id	String	ID of the enterprise project that the resource belongs to.
apply_policy_id	String	Policy ID.
tags	Array of Tag objects	Resource tags.
topology	String	Site network topology. <ul style="list-style-type: none"> • p2p: point-to-point topology • mesh: mesh topology • star: star topology • hybrid: hybrid topology
connections	Array of SiteConnection objects	List of site-to-site connections.
sites	Array of SiteInformation objects	A node in a point-to-point or mesh topology.
hub_site	SiteInformation object	Site information.
spoke_sites	Array of SiteInformation objects	Site list.

Table 4-465 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 4-466 SiteConnection

Parameter	Type	Description
id	String	Instance ID.
site_network_id	String	Site network ID.
state	String	Site-to-site 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 connection failed. • FREEZED: The connection is frozen. • DELETED: The connection is deleted.
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
edge_pair	Array of DirectedEdge objects	Definition of the two ends of a site-to-site connection. The length is fixed to an array of 2.
cross_region_type	String	Communications within a region or between regions. <ul style="list-style-type: none"> • intra-region: communications within a region • inter-region: communications between regions
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Amount of bandwidth, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.
frozen_effect	String	Resource frozen effect. <ul style="list-style-type: none"> • RELEASABLE: The resource is frozen and can be released. • UNRELEASABLE: The resource is frozen and cannot be released.
is_bind_bandwidth	Boolean	Whether a bandwidth package is bound.

Table 4-467 DirectedEdge

Parameter	Type	Description
id	String	Instance ID.
region_id	String	Region ID.
gateway_id	String	Gateway ID.
gateway_type	String	Gateway type. GDGW indicates global DC gateways.
site_code	String	Site code.
project_id	String	Project ID.

Table 4-468 SiteInformation

Parameter	Type	Description
region_id	String	Region ID.

Parameter	Type	Description
project_id	String	Project ID.
gateway_type	String	Gateway type. GDGW indicates global DC gateways.
gateway_id	String	Gateway ID.
site_code	String	Site code.
asn	Long	ASN of the network instance when BGP is used for routing.

Example Requests

Deleting a site network

```
DELETE /v3/{domain_id}/dcaas/site-networks/{site_network_id}
```

Example Responses

Status code: 202

The site network has been deleted.

```
{
  "request_id": "0050ea65af7e190d9a791d9e69f28e63",
  "site_network": {
    "id": "eb350a5c-06c1-4b12-9ae4-3820f31faaa0",
    "name": "er-connection",
    "domain_id": "XXX",
    "created_at": "2023-10-09T10:15:32.134Z",
    "updated_at": "2023-10-09T10:15:32.134Z",
    "enterprise_project_id": "0",
    "apply_policy_id": "43ad756e-2780-463e-a8ed-27a5bd77b7a7",
    "topology": "p2p",
    "state": "DELETING",
    "sites": [ {
      "gateway_id": "1c233723-234c-4b50-8fba-7072b4c6aa1a",
      "project_id": "XXX",
      "region_id": "region-abc",
      "site_code": "region-abc",
      "gateway_type": "GDGW"
    }, {
      "gateway_id": "8641d7f0-bd0c-49fe-8b70-3649cd7dd9b1",
      "project_id": "XXX",
      "region_id": "region-abc",
      "site_code": "region-abc",
      "gateway_type": "GDGW"
    } ],
    "connections": [ {
      "id": "1c233723-234c-4b50-8fba-7072b4c6aa1a",
      "state": "AVAILABLE",
      "cross_region_type": "inter-region",
      "global_connection_bandwidth_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
      "bandwidth_size": 20,
      "is_frozen": false,
      "is_bind_bandwidth": false,
      "edge_pair": [ {
        "id": "1c233723-234c-4b50-8fba-7072b4c6aa1a",
        "gateway_id": "8641d7f0-bd0c-49fe-8b70-3649cd7dd9b1",

```

```
"project_id" : "XXX",
"region_id" : "region-abc",
"site_code" : "region-abc",
"gateway_type" : "GDGW"
}, {
  "id" : "1c233723-234c-4b50-8fba-7072b4c6aa11",
  "gateway_id" : "8641d7f0-bd0c-49fe-8b70-3649cd7dd9b1",
  "project_id" : "XXX",
  "region_id" : "region-abc",
  "site_code" : "region-abc",
  "gateway_type" : "GDGW"
}]
}]
}
```

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 DeleteSiteNetworkSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_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();
        DeleteSiteNetworkRequest request = new DeleteSiteNetworkRequest();
        request.withSiteNetworkId("{site_network_id}");
        try {
            DeleteSiteNetworkResponse response = client.deleteSiteNetwork(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

```
}  
}  
}
```

Python

```
# coding: utf-8  
  
import os  
from huaweicloudsdkcore.auth.credentials import 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 = os.environ["CLOUD_SDK_AK"]  
    sk = os.environ["CLOUD_SDK_SK"]  
  
    credentials = GlobalCredentials(ak, sk)  
  
    client = CcClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(CcRegion.value_of("<YOUR REGION>")) \  
        .build()  
  
    try:  
        request = DeleteSiteNetworkRequest()  
        request.site_network_id = "{site_network_id}"  
        response = client.delete_site_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.DeleteSiteNetworkRequest{}
request.SiteNetworkId = "{site_network_id}"
response, err := client.DeleteSiteNetwork(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 site network has been deleted.

Error Codes

See [Error Codes](#).

4.11 Site-to-site Connection Management

4.11.1 Unbinding a Bandwidth Package from a Site-to-site Connection

Function

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

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

```
POST /v3/{domain_id}/dcaas/site-network/{site_network_id}/connections/
{site_connection_id}/disassociate
```

Table 4-469 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
site_network_id	Yes	String	Site network ID.
site_connection_id	Yes	Object	Site-to-site connection ID.

Request Parameters

Table 4-470 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 202

Table 4-471 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
site_connection	SiteConnection object	Site-to-site connection.

Table 4-472 SiteConnection

Parameter	Type	Description
id	String	Instance ID.
site_network_id	String	Site network ID.

Parameter	Type	Description
state	String	<p>Site-to-site 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 connection failed. • FREEZED: The connection is frozen. • DELETED: The connection is deleted.
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.
edge_pair	Array of DirectedEdge objects	Definition of the two ends of a site-to-site connection. The length is fixed to an array of 2.
cross_region_type	String	<p>Communications within a region or between regions.</p> <ul style="list-style-type: none"> • intra-region: communications within a region • inter-region: communications between regions
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Amount of bandwidth, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.

Parameter	Type	Description
frozen_effect	String	Resource frozen effect. <ul style="list-style-type: none"> RELEASABLE: The resource is frozen and can be released. UNRELEASABLE: The resource is frozen and cannot be released.
is_bind_bandwidth	Boolean	Whether a bandwidth package is bound.

Table 4-473 DirectedEdge

Parameter	Type	Description
id	String	Instance ID.
region_id	String	Region ID.
gateway_id	String	Gateway ID.
gateway_type	String	Gateway type. GDGW indicates global DC gateways.
site_code	String	Site code.
project_id	String	Project ID.

Example Requests

Frozen effect.

- **RELEASABLE**: The resource is frozen and can be released.
- **UNRELEASABLE**: The resource is frozen and cannot be released.

POST /v3/{domain_id}/dcaas/site-network/{site_network_id}/connections/{site_connection_id}/disassociate

Example Responses

Status code: 202

The bandwidth package has been unbound from the site-to-site connection.

```
{
  "request_id" : "0050ea65af7e190d9a791d9e69f28e63",
  "site_connection" : {
    "id" : "eb350a5c-06c1-4b12-9ae4-3820f31faaa0",
    "site_network_id" : "eb350a5c-06c1-4b12-9ae4-3820f31faaa0",
    "state" : "UPDATING",
    "created_at" : "2023-10-09T10:15:32.134Z",
    "updated_at" : "2023-10-09T10:15:32.134Z",
    "cross_region_type" : "inter-region",
    "bandwidth_size" : 0,
    "is_frozen" : false,
    "edge_pair" : [ {
      "id" : "1c233723-234c-4b50-8fba-7072b4c6aa1a",
```

```
"gateway_id" : "1c233723-234c-4b50-8fba-7072b4c6aa1a",
"project_id" : "XXX",
"region_id" : "region-abc",
"site_code" : "region-abc",
"gateway_type" : "GDGW"
}, {
  "id" : "1c233723-234c-4b50-8fba-7072b4c6aa11",
  "gateway_id" : "8641d7f0-bd0c-49fe-8b70-3649cd7dd9b2",
  "project_id" : "XXX",
  "region_id" : "region-abc",
  "site_code" : "region-abc",
  "gateway_type" : "GDGW"
}]
}
```

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 DisassociateSiteNetworkBandwidthSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_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();
        DisassociateSiteNetworkBandwidthRequest request = new
        DisassociateSiteNetworkBandwidthRequest();
        request.withSiteNetworkId("{site_network_id}");
        request.withSiteConnectionId();
        try {
            DisassociateSiteNetworkBandwidthResponse response =
            client.disassociateSiteNetworkBandwidth(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
        }
    }
}
```

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

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import 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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = DisassociateSiteNetworkBandwidthRequest()
        request.site_network_id = "{site_network_id}"
        request.site_connection_id =
        response = client.disassociate_site_network_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.DisassociateSiteNetworkBandwidthRequest{}
request.SiteNetworkId = "{site_network_id}"
response, err := client.DisassociateSiteNetworkBandwidth(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 package has been unbound from the site-to-site connection.

Error Codes

See [Error Codes](#).

4.11.2 Binding a Bandwidth Package to a Site-to-Site Connection

Function

This API is used to bind a bandwidth package to a site-to-site connection.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

POST /v3/{domain_id}/dcaas/site-network/{site_network_id}/connections/{site_connection_id}/associate

Table 4-474 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
site_network_id	Yes	String	Site network ID.
site_connection_id	Yes	Object	Site-to-site connection ID.

Request Parameters

Table 4-475 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Table 4-476 Request body parameters

Parameter	Mandatory	Type	Description
site_connection	Yes	AssociateSiteConnectionBandwidth object	Request body for binding a bandwidth package to a site-to-site connection.

Table 4-477 AssociateSiteConnectionBandwidth

Parameter	Mandatory	Type	Description
global_connection_bandwidth_id	No	String	Global connection bandwidth ID.
bandwidth_size	No	Integer	Amount of bandwidth, in Mbit/s.

Response Parameters

Status code: 202

Table 4-478 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
site_connection	SiteConnection object	Site-to-site connection.

Table 4-479 SiteConnection

Parameter	Type	Description
id	String	Instance ID.
site_network_id	String	Site network ID.
state	String	Site-to-site 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 connection failed. ● FREEZED: The connection is frozen. ● DELETED: The connection is deleted.
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.
edge_pair	Array of DirectedEdge objects	Definition of the two ends of a site-to-site connection. The length is fixed to an array of 2.

Parameter	Type	Description
cross_region_type	String	Communications within a region or between regions. <ul style="list-style-type: none"> • intra-region: communications within a region • inter-region: communications between regions
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Amount of bandwidth, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.
frozen_effect	String	Resource frozen effect. <ul style="list-style-type: none"> • RELEASABLE: The resource is frozen and can be released. • UNRELEASABLE: The resource is frozen and cannot be released.
is_bind_bandwidth	Boolean	Whether a bandwidth package is bound.

Table 4-480 DirectedEdge

Parameter	Type	Description
id	String	Instance ID.
region_id	String	Region ID.
gateway_id	String	Gateway ID.
gateway_type	String	Gateway type. GDGW indicates global DC gateways.
site_code	String	Site code.
project_id	String	Project ID.

Example Requests

Binding a bandwidth package to a site-to-site connection

```
POST /v3/{domain_id}/dcaas/site-network/{site_network_id}/connections/{site_connection_id}/associate
{
  "site_connection": {
    "global_connection_bandwidth_id": "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "bandwidth_size": 20
  }
}
```


Example Responses

Status code: 202

The bandwidth package has been bound to the site-to-site connection.

```
{
  "request_id" : "0050ea65af7e190d9a791d9e69f28e63",
  "site_connection" : {
    "id" : "eb350a5c-06c1-4b12-9ae4-3820f31faaa0",
    "site_network_id" : "eb350a5c-06c1-4b12-9ae4-3820f31faaa0",
    "state" : "UPDATING",
    "created_at" : "2023-10-09T10:15:32.134Z",
    "updated_at" : "2023-10-09T10:15:32.134Z",
    "cross_region_type" : "inter-region",
    "bandwidth_size" : 0,
    "is_frozen" : false,
    "edge_pair" : [ {
      "id" : "1c233723-234c-4b50-8fba-7072b4c6aa1a",
      "gateway_id" : "1c233723-234c-4b50-8fba-7072b4c6aa1a",
      "project_id" : "XXX",
      "region_id" : "region-abc",
      "site_code" : "region-abc",
      "gateway_type" : "GDGW"
    }, {
      "id" : "1c233723-234c-4b50-8fba-7072b4c6aa11",
      "gateway_id" : "8641d7f0-bd0c-49fe-8b70-3649cd7dd9b2",
      "project_id" : "XXX",
      "region_id" : "region-abc",
      "site_code" : "region-abc",
      "gateway_type" : "GDGW"
    }
  ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Binding a bandwidth package to a site-to-site 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 AssociateSiteNetworkBandwidthSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_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();
AssociateSiteNetworkBandwidthRequest request = new AssociateSiteNetworkBandwidthRequest();
request.withSiteNetworkId("{site_network_id}");
request.withSiteConnectionId();
AssociateSiteConnectionBandwidthRequestBody body = new
AssociateSiteConnectionBandwidthRequestBody();
AssociateSiteConnectionBandwidth siteConnectionbody = new AssociateSiteConnectionBandwidth();
siteConnectionbody.withGlobalConnectionBandwidthId("a3bad420-33b8-4e26-9e9b-bdf67aa8e72b")
    .withBandwidthSize(20L);
body.withSiteConnection(siteConnectionbody);
request.withBody(body);
try {
    AssociateSiteNetworkBandwidthResponse response =
client.associateSiteNetworkBandwidth(request);
    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 bandwidth package to a site-to-site connection

```
# coding: utf-8

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = AssociateSiteNetworkBandwidthRequest()
        request.site_network_id = "{site_network_id}"
        request.site_connection_id =
siteConnectionbody = AssociateSiteConnectionBandwidth(
    global_connection_bandwidth_id="a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
```

```
        bandwidth_size=20
    )
    request.body = AssociateSiteConnectionBandwidthRequestBody(
        site_connection=siteConnectionbody
    )
    response = client.associate_site_network_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

Binding a bandwidth package to a site-to-site 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.AssociateSiteNetworkBandwidthRequest{}
    request.SiteNetworkId = "{site_network_id}"
    globalConnectionBandwidthIdSiteConnection := "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b"
    bandwidthSizeSiteConnection := int64(20)
    siteConnectionbody := &model.AssociateSiteConnectionBandwidth{
        GlobalConnectionBandwidthId: &globalConnectionBandwidthIdSiteConnection,
        BandwidthSize: &bandwidthSizeSiteConnection,
    }
    request.Body = &model.AssociateSiteConnectionBandwidthRequestBody{
        SiteConnection: siteConnectionbody,
    }
    response, err := client.AssociateSiteNetworkBandwidth(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 package has been bound to the site-to-site connection.

Error Codes

See [Error Codes](#).

4.11.3 Changing the Bandwidth of a Site-to-Site Connection

Function

This API is used to change the bandwidth of a site-to-site connection.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

POST /v3/{domain_id}/dcaas/site-network/{site_network_id}/connections/{site_connection_id}/update-bandwidth-size

Table 4-481 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
site_network_id	Yes	String	Site network ID.
site_connection_id	Yes	Object	Site-to-site connection ID.

Request Parameters

Table 4-482 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Table 4-483 Request body parameters

Parameter	Mandatory	Type	Description
site_connection	Yes	UpdateSiteConnectionBandwidthSize object	Request body for modifying the bandwidth of a site-to-site connection.

Table 4-484 UpdateSiteConnectionBandwidthSize

Parameter	Mandatory	Type	Description
bandwidth_size	No	Integer	Amount of bandwidth, in Mbit/s.

Response Parameters

Status code: 202

Table 4-485 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
site_connection	SiteConnection object	Site-to-site connection.

Table 4-486 SiteConnection

Parameter	Type	Description
id	String	Instance ID.
site_network_id	String	Site network ID.

Parameter	Type	Description
state	String	<p>Site-to-site 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 connection failed. • FREEZED: The connection is frozen. • DELETED: The connection is deleted.
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.
edge_pair	Array of DirectedEdge objects	Definition of the two ends of a site-to-site connection. The length is fixed to an array of 2.
cross_region_type	String	<p>Communications within a region or between regions.</p> <ul style="list-style-type: none"> • intra-region: communications within a region • inter-region: communications between regions
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Amount of bandwidth, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.

Parameter	Type	Description
frozen_effect	String	Resource frozen effect. <ul style="list-style-type: none"> RELEASABLE: The resource is frozen and can be released. UNRELEASABLE: The resource is frozen and cannot be released.
is_bind_bandwidth	Boolean	Whether a bandwidth package is bound.

Table 4-487 DirectedEdge

Parameter	Type	Description
id	String	Instance ID.
region_id	String	Region ID.
gateway_id	String	Gateway ID.
gateway_type	String	Gateway type. GDGW indicates global DC gateways.
site_code	String	Site code.
project_id	String	Project ID.

Example Requests

Changing the bandwidth of a site-to-site connection

```
POST /v3/{domain_id}/dcaas/site-network/{site_network_id}/connections/{site_connection_id}/update-bandwidth-size
```

```
{
  "site_connection" : {
    "bandwidth_size" : 20
  }
}
```

Example Responses

Status code: 202

The bandwidth of the site-to-site connection has been changed.

```
{
  "request_id" : "0050ea65af7e190d9a791d9e69f28e63",
  "site_connection" : {
    "id" : "eb350a5c-06c1-4b12-9ae4-3820f31faaa0",
    "site_network_id" : "eb350a5c-06c1-4b12-9ae4-3820f31faaa0",
    "state" : "UPDATING",
    "created_at" : "2023-10-09T10:15:32.134Z",
    "updated_at" : "2023-10-09T10:15:32.134Z",
    "cross_region_type" : "inter-region",
  }
}
```

```
"bandwidth_size" : 0,
"is_frozen" : false,
"edge_pair" : [ {
  "id" : "1c233723-234c-4b50-8fba-7072b4c6aa1a",
  "gateway_id" : "1c233723-234c-4b50-8fba-7072b4c6aa1a",
  "project_id" : "XXX",
  "region_id" : "region-abc",
  "site_code" : "region-abc",
  "gateway_type" : "GDGW"
}, {
  "id" : "1c233723-234c-4b50-8fba-7072b4c6aa11",
  "gateway_id" : "8641d7f0-bd0c-49fe-8b70-3649cd7dd9b2",
  "project_id" : "XXX",
  "region_id" : "region-abc",
  "site_code" : "region-abc",
  "gateway_type" : "GDGW"
} ]
}
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Changing the bandwidth of a site-to-site 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 UpdateSiteNetworkBandwidthSizeSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_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();
        UpdateSiteNetworkBandwidthSizeRequest request = new UpdateSiteNetworkBandwidthSizeRequest();
        request.withSiteNetworkId("{site_network_id}");
        request.withSiteConnectionId();
        UpdateSiteConnectionBandwidthSizeRequestBody body = new
        UpdateSiteConnectionBandwidthSizeRequestBody();
        UpdateSiteConnectionBandwidthSize siteConnectionbody = new
        UpdateSiteConnectionBandwidthSize();
        siteConnectionbody.withBandwidthSize(20L);
    }
}
```



```
body.withSiteConnection(siteConnectionbody);
request.withBody(body);
try {
    UpdateSiteNetworkBandwidthSizeResponse response =
client.updateSiteNetworkBandwidthSize(request);
    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 site-to-site connection

```
# coding: utf-8

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = UpdateSiteNetworkBandwidthSizeRequest()
        request.site_network_id = "{site_network_id}"
        request.site_connection_id =
        siteConnectionbody = UpdateSiteConnectionBandwidthSize(
            bandwidth_size=20
        )
        request.body = UpdateSiteConnectionBandwidthSizeRequestBody(
            site_connection=siteConnectionbody
        )
        response = client.update_site_network_bandwidth_size(request)
        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 site-to-site 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.UpdateSiteNetworkBandwidthSizeRequest{}
    request.SiteNetworkId = "{site_network_id}"
    bandwidthSizeSiteConnection := int64(20)
    siteConnectionbody := &model.UpdateSiteConnectionBandwidthSize{
        BandwidthSize: &bandwidthSizeSiteConnection,
    }
    request.Body = &model.UpdateSiteConnectionBandwidthSizeRequestBody{
        SiteConnection: siteConnectionbody,
    }
    response, err := client.UpdateSiteNetworkBandwidthSize(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 the site-to-site connection has been changed.

Error Codes

See [Error Codes](#).

4.11.4 Changing the Bandwidth Package of a Site-to-Site Connection

Function

This API is used to change the bandwidth package of a site-to-site connection.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

POST /v3/{domain_id}/dcaas/site-network/{site_network_id}/connections/{site_connection_id}/update-bandwidth

Table 4-488 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
site_network_id	Yes	String	Site network ID.
site_connection_id	Yes	Object	Site-to-site connection ID.

Request Parameters

Table 4-489 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Table 4-490 Request body parameters

Parameter	Mandatory	Type	Description
site_connection	Yes	UpdateSiteConnectionBandwidth object	Request body for binding another bandwidth package to a site-to-site connection.

Table 4-491 UpdateSiteConnectionBandwidth

Parameter	Mandatory	Type	Description
global_connection_bandwidth_id	No	String	Global connection bandwidth ID.
bandwidth_size	No	Integer	Amount of bandwidth, in Mbit/s.

Response Parameters

Status code: 202

Table 4-492 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
site_connection	SiteConnection object	Site-to-site connection.

Table 4-493 SiteConnection

Parameter	Type	Description
id	String	Instance ID.
site_network_id	String	Site network ID.

Parameter	Type	Description
state	String	<p>Site-to-site 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 connection failed. • FREEZED: The connection is frozen. • DELETED: The connection is deleted.
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.
edge_pair	Array of DirectedEdge objects	Definition of the two ends of a site-to-site connection. The length is fixed to an array of 2.
cross_region_type	String	<p>Communications within a region or between regions.</p> <ul style="list-style-type: none"> • intra-region: communications within a region • inter-region: communications between regions
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Amount of bandwidth, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.

Parameter	Type	Description
frozen_effect	String	Resource frozen effect. <ul style="list-style-type: none"> RELEASABLE: The resource is frozen and can be released. UNRELEASABLE: The resource is frozen and cannot be released.
is_bind_bandwidth	Boolean	Whether a bandwidth package is bound.

Table 4-494 DirectedEdge

Parameter	Type	Description
id	String	Instance ID.
region_id	String	Region ID.
gateway_id	String	Gateway ID.
gateway_type	String	Gateway type. GDGW indicates global DC gateways.
site_code	String	Site code.
project_id	String	Project ID.

Example Requests

Changing the bandwidth package of a site-to-site connection

```
POST /v3/{domain_id}/dcaas/site-network/{site_network_id}/connections/{site_connection_id}/update-bandwidth
{
  "site_connection" : {
    "global_connection_bandwidth_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "bandwidth_size" : 20
  }
}
```

Example Responses

Status code: 202

The bandwidth package of the site-to-site connection has been changed.

```
{
  "request_id" : "0050ea65af7e190d9a791d9e69f28e63",
  "site_connection" : {
    "id" : "eb350a5c-06c1-4b12-9ae4-3820f31faaa0",
    "site_network_id" : "eb350a5c-06c1-4b12-9ae4-3820f31faaa0",
    "state" : "UPDATING",
    "created_at" : "2023-10-09T10:15:32.134Z",
    "updated_at" : "2023-10-09T10:15:32.134Z",
  }
}
```

```
"cross_region_type" : "inter-region",
"bandwidth_size" : 0,
"is_frozen" : false,
"edge_pair" : [ {
  "id" : "1c233723-234c-4b50-8fba-7072b4c6aa1a",
  "gateway_id" : "1c233723-234c-4b50-8fba-7072b4c6aa1a",
  "project_id" : "XXX",
  "region_id" : "region-abc",
  "site_code" : "region-abc",
  "gateway_type" : "GDGW"
}, {
  "id" : "1c233723-234c-4b50-8fba-7072b4c6aa11",
  "gateway_id" : "8641d7f0-bd0c-49fe-8b70-3649cd7dd9b2",
  "project_id" : "XXX",
  "region_id" : "region-abc",
  "site_code" : "region-abc",
  "gateway_type" : "GDGW"
} ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Changing the bandwidth package of a site-to-site 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 UpdateSiteNetworkBandwidthSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_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();
        UpdateSiteNetworkBandwidthRequest request = new UpdateSiteNetworkBandwidthRequest();
        request.withSiteNetworkId("{site_network_id}");
        request.withSiteConnectionId();
        AssociateSiteConnectionBandwidthRequestBody body = new
        AssociateSiteConnectionBandwidthRequestBody();
        AssociateSiteConnectionBandwidth siteConnectionbody = new AssociateSiteConnectionBandwidth();
        siteConnectionbody.withGlobalConnectionBandwidthId("a3bad420-33b8-4e26-9e9b-bdf67aa8e72b")
    }
}
```

```
.withBandwidthSize(20L);
body.withSiteConnection(siteConnectionbody);
request.withBody(body);
try {
    UpdateSiteNetworkBandwidthResponse response = client.updateSiteNetworkBandwidth(request);
    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 package of a site-to-site connection

```
# coding: utf-8

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = UpdateSiteNetworkBandwidthRequest()
        request.site_network_id = "{site_network_id}"
        request.site_connection_id =
        siteConnectionbody = AssociateSiteConnectionBandwidth(
            global_connection_bandwidth_id="a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
            bandwidth_size=20
        )
        request.body = AssociateSiteConnectionBandwidthRequestBody(
            site_connection=siteConnectionbody
        )
        response = client.update_site_network_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

Changing the bandwidth package of a site-to-site 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.UpdateSiteNetworkBandwidthRequest{}
    request.SiteNetworkId = "{site_network_id}"
    globalConnectionBandwidthIdSiteConnection:= "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b"
    bandwidthSizeSiteConnection:= int64(20)
    siteConnectionbody := &model.AssociateSiteConnectionBandwidth{
        GlobalConnectionBandwidthId: &globalConnectionBandwidthIdSiteConnection,
        BandwidthSize: &bandwidthSizeSiteConnection,
    }
    request.Body = &model.AssociateSiteConnectionBandwidthRequestBody{
        SiteConnection: siteConnectionbody,
    }
    response, err := client.UpdateSiteNetworkBandwidth(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 package of the site-to-site connection has been changed.

Error Codes

See [Error Codes](#).

4.12 Cloud Connection Quotas

4.12.1 Querying Cloud Connection Resource Quotas

Function

This API is used to query cloud connection resource quotas.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

GET /v3/{domain_id}/ccaas/quotas

Table 4-495 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-496 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 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.
quota_type	Yes	String	Quota type. <ul style="list-style-type: none"> • cloud_connection: the maximum number of cloud connections that can be created in an account • cloud_connection_region: the maximum number of regions where a cloud connection can be used • cloud_connection_route: the maximum number of routes that can be added to a cloud connection • region_network_instance: the maximum number of network instances that can be loaded to a cloud connection in a region
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 .
region_id	No	String	Region ID. This parameter is mandatory when you query the value of region_network_instance .

Request Parameters

Table 4-497 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-498 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
quotas	Array of CloudConnectionQuota objects	Quota list.

Table 4-499 CloudConnectionQuota

Parameter	Type	Description
domain_id	String	ID of the account that the instance belongs to.
cloud_connection_id	String	Cloud connection 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.

Parameter	Type	Description
quota_used	Integer	Used quotas.

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();
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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        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{}
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](#).

4.13 Central Network Quotas

4.13.1 Querying Central Network Resource Quotas

Function

This API is used to query the resource quotas.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

GET /v3/{domain_id}/gcn/quotas

Table 4-500 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-501 Query Parameters

Parameter	Mandatory	Type	Description
quota_type	No	Array of arrays	Quota type. Multiple quota types can be queried.
limit	No	Integer	Number of records on each page. Value range: 1 to 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.

Request Parameters

Table 4-502 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-503 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
quotas	Array of CentralNetworkQuota objects	Quota list.

Table 4-504 CentralNetworkQuota

Parameter	Type	Description
quota_key	String	Quota type of a central network.- 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

Parameter	Type	Description
quota_limit	Integer	Quotas.
used	Integer	Used quotas.
unit	String	Unit of the quota value.

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.*;

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

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import 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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        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"
    cc "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    "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{}
    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](#).

4.14 Central Network Capabilities

4.14.1 Querying Central Network Capabilities

Function

This API is used to query central network capabilities.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

GET /v3/{domain_id}/gcn/capabilities

Table 4-505 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-506 Query Parameters

Parameter	Mandatory	Type	Description
capability	No	Array of arrays	Capabilities. Multiple capabilities can be queried.
limit	No	Integer	Number of records on each page. Value range: 1 to 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.

Request Parameters

Table 4-507 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-508 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
page_info	PageInfo object	Pagination query information.
capabilities	Array of CentralNetworkCapability objects	List of central network capabilities.

Table 4-509 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Table 4-510 CentralNetworkCapability

Parameter	Type	Description
id	String	Instance ID.
domain_id	String	ID of the account that the instance belongs to.

Parameter	Type	Description
capability	String	<p>Central network capabilities.</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 connection bandwidth for assigning cross-site connection bandwidths • connection-bandwidth.free-line: free lines for cross-site connections • 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 global connection bandwidth classes for enterprise routers • er-instance.support-sts5-regions: list of the regions where sts5 can make API calls to Enterprise Router • er-instance.support-sites: list of the sites where Enterprise Router is available • custom-connections.is-support: custom connections • custom-connections.support-regions: list of the regions where custom connections can be created • gdgw-instance.support-dscp-regions: list of the regions where the bandwidth for global DC gateways has different classes

Parameter	Type	Description
		<ul style="list-style-type: none"> • gdgw-instance.support-freeze-regions: list of the regions where global connection bandwidths used by global DC gateways can be frozen • gdgw-attachment.is-support: global DC gateways as attachments • gdgw-attachment.support-regions: list of the regions where global DC gateways can be used as attachments • gdgw-attachment.support-sites: list of the sites where global DC gateways can be used as attachments • er-route-table-attachment.is-support: enterprise router route tables as attachments • er-route-table-attachment.support-regions: list of the regions where enterprise router route tables can be used as attachments • er-route-table-attachment.support-sites: list of the sites where enterprise router route tables can be used as attachments • cloud-alliance.support-regions: list of the regions that support Cloud Alliance

Example Requests

Querying central network capabilities

```
GET https://{cc_endpoint}/v3/gcn/capabilities
```

Example Responses

Status code: 200

Central network capabilities have been queried.

```
{
  "request_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "page_info" : {
    "current_count" : 1
  },
  "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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;

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();
        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
```

```
import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        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	Central network capabilities have been queried.

Error Codes

See [Error Codes](#).

4.15 Site Network Quotas

4.15.1 Querying Site Network Quotas

Function

This API is used to query site network quotas.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

GET /v3/{domain_id}/dcaas/site-network/quotas

Table 4-511 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-512 Query Parameters

Parameter	Mandatory	Type	Description
quota_type	No	Array of arrays	Quota type. Multiple quota types can be queried.
limit	No	Integer	Number of records on each page. Value range: 1 to 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.

Request Parameters

Table 4-513 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-514 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
quotas	Array of SiteNetworkQuota objects	Quota list of a site network.

Table 4-515 SiteNetworkQuota

Parameter	Type	Description
quota_key	String	Quota type of a site network.- site_networks_per_account : the maximum number of site networks for each account- sites_per_mesh_site_network : the maximum number of sites on a site network of the mesh type - spoke_sites_per_star_site_network : the maximum number of spoke sites on a site network of the star type- sites_per_hybrid_site_network : the maximum number of sites on a hybrid site network
quota_limit	Integer	Quotas.
used	Integer	Used quotas.
unit	String	Unit of the quota value.

Example Requests

Querying site network quotas

```
GET https://{cc_endpoint}/v3/{domain_id}/dcaas/site-network/quotas
```

Example Responses

Status code: 200

Site network quotas have been queried.

```
{
  "request_id" : "XXX",
  "quotas" : [ {
    "quota_key" : "site_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.*;

public class ListSiteNetworkQuotasSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_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();
        ListSiteNetworkQuotasRequest request = new ListSiteNetworkQuotasRequest();
        try {
            ListSiteNetworkQuotasResponse response = client.listSiteNetworkQuotas(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import 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 = os.getenv("CLOUD_SDK_AK")
    sk = 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 = ListSiteNetworkQuotasRequest()
    response = client.list_site_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.ListSiteNetworkQuotasRequest{}
    response, err := client.ListSiteNetworkQuotas(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	Site network quotas have been queried.

Error Codes

See [Error Codes](#).

4.16 Site Network Capabilities

4.16.1 Querying the List of Site Network Capabilities

Function

This API is used to query the list of site network capabilities.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

GET /v3/{domain_id}/dcaas/site-network/capabilities

Table 4-516 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-517 Query Parameters

Parameter	Mandatory	Type	Description
specification	No	Array of arrays	Site network capabilities. Multiple capabilities can be queried.
limit	No	Integer	Number of records on each page. Value range: 1 to 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.

Request Parameters

Table 4-518 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-519 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
page_info	PageInfo object	Pagination query information.
capabilities	Array of SiteNetworkCapabilityEntry objects	List of site network capabilities.

Table 4-520 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Table 4-521 SiteNetworkCapabilityEntry

Parameter	Type	Description
id	String	Instance ID.
domain_id	String	ID of the account that the instance belongs to.

Parameter	Type	Description
specification	String	<p>Site network capabilities.</p> <ul style="list-style-type: none"> • site-network.is-support: site networks • site-network.is-support-enterprise-project: enterprise projects for site networks • site-network.is-support-tag: site network tags • site-network.is-support-intra-region: site networks in the same region • site-network.support-topologies: site network topologies • site-network.support-regions: list of the regions that support site networks • site-network.support-dscp-regions: list of the regions where DSCP is supported on a site network • site-network.support-freeze-regions: list of the regions where site networks can be frozen • **site-network.support-locations: list of site access points • site-connection-bandwidth.size-range: amount of site-to-site connection bandwidth • site-connection-bandwidth.charge-mode: billing options of bandwidth used by a site-to-site connection • site-connection-bandwidth.free-line: free lines for cross-site connections
is_support	Boolean	Whether site networks are supported.
is_support_enterprise_project	Boolean	Whether enterprise projects are supported for site networks.
is_support_tag	Boolean	Whether tagging site networks is supported.
is_support_intra_region	Boolean	Whether site networks in the same region can be created.

Parameter	Type	Description
support_topologies	Array of strings	Topology list of a site network.
support_regions	Array of strings	List
support_dscp_regions	Array of strings	List
support_freeze_regions	Array of strings	List
support_locations	Array of strings	List
size_range	ConnectionBandwidthSizeRange object	JSON
charge_mode	Array of strings	List

Table 4-522 ConnectionBandwidthSizeRange

Parameter	Type	Description
min	Long	Minimum value.
max	Long	Maximum value.

Example Requests

Querying the list of site network capabilities

```
GET https://{cc_endpoint}/v3/{domain_id}/dcaas/site-network/capabilities
```

Example Responses

Status code: 200

The list of site network capabilities has been queried.

```
{
  "request_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "page_info" : {
    "current_count" : 9
  },
  "capabilities" : [ {
    "id" : "1b7de9bb-e222-45b0-a3c2-65210349e578",
    "specification" : "site-network.is-support",
    "domain_id" : "77c0f00509d542629d032230098950c7",
    "is_support" : true
  }, {
    "id" : "bd231847-18a6-4ae3-adc0-0b0c1d706634",
    "specification" : "site-network.is-support-enterprise-project",
    "domain_id" : "77c0f00509d542629d032230098950c7",
    "is_support_enterprise_project" : true
  }, {

```

```
"id" : "af56b862-ad14-4b8b-8919-1eef0bc08913",
"specification" : "site-network.is-support-tag",
"domain_id" : "77c0f00509d542629d032230098950c7",
"is_support_tag" : true
}, {
  "id" : "d4ed18c8-8ec8-4022-98b7-8fbb5ca487a5",
  "specification" : "site-network.is-support-intra-region",
  "domain_id" : "77c0f00509d542629d032230098950c7",
  "is_support_intra_region" : false
}, {
  "id" : "de73beea-9104-43e6-888e-2513883091af",
  "specification" : "site-network.support-topologies",
  "domain_id" : "77c0f00509d542629d032230098950c7",
  "support_topologies" : [ "P2P" ]
}, {
  "id" : "892a448c-62bd-46c9-aca0-44f1a7bb3eda",
  "specification" : "site-network.support-regions",
  "domain_id" : "77c0f00509d542629d032230098950c7",
  "support_regions" : [ "region-abc", "region-def" ]
}, {
  "id" : "8f6adfa5-517a-4a52-b04e-6b2e90836b01",
  "specification" : "site-network.support-locations",
  "domain_id" : "77c0f00509d542629d032230098950c7",
  "support_locations" : [ "Access point." ]
}, {
  "id" : "57b48e0b-16c7-4f32-9092-81e0816d7e74",
  "specification" : "site-connection-bandwidth.size-range",
  "domain_id" : "77c0f00509d542629d032230098950c7",
  "size_range" : {
    "max" : 100,
    "min" : 10
  }
}, {
  "id" : "fc04670b-d8c9-4551-b128-ef65693ec3ef",
  "specification" : "site-connection-bandwidth.charge-mode",
  "domain_id" : "77c0f00509d542629d032230098950c7",
  "charge_mode" : [ "bwd" ]
}
}]
}
```

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 ListSiteNetworkCapabilitiesSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_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();
ListSiteNetworkCapabilitiesRequest request = new ListSiteNetworkCapabilitiesRequest();
try {
    ListSiteNetworkCapabilitiesResponse response = client.listSiteNetworkCapabilities(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import 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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListSiteNetworkCapabilitiesRequest()
        response = client.list_site_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.ListSiteNetworkCapabilitiesRequest{}
    response, err := client.ListSiteNetworkCapabilities(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 site network capabilities has been queried.

Error Codes

See [Error Codes](#).

4.17 Specifications

4.17.1 Querying the Bandwidth Site List

Function

This API is used to query the bandwidth site list.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-523 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-524 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 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.
site_code	No	String	Site code.
region_id	No	String	Region ID for query.
name	No	String	Name used for fuzzy search.

Request Parameters

Table 4-525 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-526 Response body parameters

Parameter	Type	Description
bandwidth_package_sites	Array of BandwidthPackageSite objects	Site list.
request_id	String	Request ID.
page_info	PageInfo object	Pagination query information.

Table 4-527 BandwidthPackageSite

Parameter	Type	Description
id	String	Instance ID.
site_code	String	Site code.
region_id	String	Region ID.
site_type	String	Site type. The default type is region.
name_cn	String	Instance name.
name_en	String	Instance name.
description	String	Description. Angle brackets (<>) are not allowed.
created_at	String	Creation time. The UTC time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.
updated_at	String	Update time. The UTC time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.

Table 4-528 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Example Requests

Querying the bandwidth site list

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

Example Responses

Status code: 200

The bandwidth site list has been queried.

```
{
  "bandwidth_package_sites" : [ {
    "id" : "e3371202-7e85-4c16-bb4b-4e3c092734f7",
    "created_at" : "2023-09-20T08:28:28Z",
    "updated_at" : "2023-09-20T08:28:28Z",
    "region_id" : "region-abc",
    "site_code" : "region-abc",
    "site_type" : "Region",
    "name_cn" : "Site abc",
    "name_en" : "site-abc",
    "description" : "description"
  } ],
  "request_id" : "e3371202-7e85-4c16-bb4b-4e3c092734f7",
  "page_info" : {
    "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.*;

public class ListBandwidthPackageSitesSolution {
    public static void main(String[] args) {
```

```
// The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_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();
ListBandwidthPackageSitesRequest request = new ListBandwidthPackageSitesRequest();
try {
    ListBandwidthPackageSitesResponse response = client.listBandwidthPackageSites(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import 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 = os.getenv("CLOUD_SDK_AK")
    sk = 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 = ListBandwidthPackageSitesRequest()
        response = client.list_bandwidth_package_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.ListBandwidthPackageSitesRequest{}
    response, err := client.ListBandwidthPackageSites(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 site list has been queried.

Error Codes

See [Error Codes](#).

4.17.2 Querying the Bandwidth Class List

Function

This API is used to query the bandwidth class list.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-529 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-530 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 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.
level	No	String	Bandwidth class for query.
name	No	String	Name used for fuzzy search.

Request Parameters

Table 4-531 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-532 Response body parameters

Parameter	Type	Description
bandwidth_package_levels	Array of BandwidthPackageLevel objects	List of bandwidth package classes.
request_id	String	Request ID.
page_info	PageInfo object	Pagination query information.

Table 4-533 BandwidthPackageLevel

Parameter	Type	Description
id	String	Instance ID.
level	String	Bandwidth package class.
name_cn	String	Instance name.
name_en	String	Instance name.
display_priority	Integer	Priority of the bandwidth package. A smaller value indicates a higher priority. <ul style="list-style-type: none"> Platinum: 1 to 50 Gold: 51 to 100 Silver: 101 to 150 Other: greater than 151
description	String	Description. Angle brackets (<>) are not allowed.
created_at	String	Creation time. The UTC time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.

Parameter	Type	Description
updated_at	String	Update time. The UTC time is in the <i>yyyy-MM-ddTHH:mm:ss</i> format.

Table 4-534 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Example Requests

Querying the bandwidth class list

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

Example Responses

Status code: 200

The bandwidth class list has been queried.

```
{
  "bandwidth_package_levels": [ {
    "id": "e3371202-7e85-4c16-bb4b-4e3c092734f7",
    "created_at": "2023-09-20T08:28:28Z",
    "updated_at": "2023-09-20T08:28:28Z",
    "level": "Pt",
    "display_priority": 1,
    "name_cn": "Platinum",
    "name_en": "PT",
    "description": "description"
  } ],
  "request_id": "e3371202-7e85-4c16-bb4b-4e3c092734f7",
  "page_info": {
    "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.*;

public class ListBandwidthPackageLevelsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_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();
        ListBandwidthPackageLevelsRequest request = new ListBandwidthPackageLevelsRequest();
        try {
            ListBandwidthPackageLevelsResponse response = client.listBandwidthPackageLevels(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import 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 = os.getenv("CLOUD_SDK_AK")
    sk = 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 = ListBandwidthPackageLevelsRequest()
    response = client.list_bandwidth_package_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.ListBandwidthPackageLevelsRequest{}
    response, err := client.ListBandwidthPackageLevels(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 class list has been queried.

Error Codes

See [Error Codes](#).

4.17.3 Querying the Bandwidth Line List

Function

This API is used to query the bandwidth line list.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

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

Table 4-535 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-536 Query Parameters

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

Parameter	Mandatory	Type	Description
level	No	String	Bandwidth class for query.
name	No	String	Name used for fuzzy search.

Request Parameters

Table 4-537 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-538 Response body parameters

Parameter	Type	Description
bandwidth_package_lines	Array of BandwidthPackageLine objects	List of bandwidth package lines.
request_id	String	Request ID.
page_info	PageInfo object	Pagination query information.

Table 4-539 BandwidthPackageLine

Parameter	Type	Description
local_region_id	String	Region ID.
remote_region_id	String	Region ID.
local_site_code	String	Site code.
remote_site_code	String	Site code.
support_levels	Array of strings	List of supported classes.
spec_codes	Array of BandwidthPackageLineSpecCode objects	Offering code list.

Table 4-540 BandwidthPackageLineSpecCode

Parameter	Type	Description
level	String	Bandwidth package class.
name_cn	String	Instance name.
name_en	String	Instance name.
spec_code	String	Specification code of the bandwidth package.
max_bandwidth	Integer	Maximum bandwidth.
min_bandwidth	Integer	Minimum bandwidth.
support_billing_modes	Array of integers	Billing mode.

Table 4-541 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Example Requests

Querying the bandwidth line list

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

Example Responses

Status code: 200

The bandwidth line list has been queried.

```
{
  "bandwidth_package_lines" : [ ],
  "request_id" : "e3371202-7e85-4c16-bb4b-4e3c092734f7",
  "page_info" : {
    "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.*;

public class ListBandwidthPackageLinesSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_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();
        ListBandwidthPackageLinesRequest request = new ListBandwidthPackageLinesRequest();
        try {
            ListBandwidthPackageLinesResponse response = client.listBandwidthPackageLines(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import 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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
```

```
credentials = GlobalCredentials(ak, sk)

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

try:
    request = ListBandwidthPackageLinesRequest()
    response = client.list_bandwidth_package_lines(request)
    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.ListBandwidthPackageLinesRequest{}
    response, err := client.ListBandwidthPackageLines(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 line list has been queried.

Error Codes

See [Error Codes](#).

4.18 Global Connection Bandwidths

4.18.1 Querying the Global Connection Bandwidth List

Function

This API is used to query the global connection bandwidth list.

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

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

GET /v3/{domain_id}/gcb/gcbbandwidths

Table 4-542 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-543 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 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.
id	No	Array of arrays	Resource ID. Multiple IDs can be queried.
name	No	Array of strings	Resource name. Multiple names can be queried.
enterprise_project_id	No	Array of strings	Enterprise project IDs.
instance_id	No	Array of strings	Bound instance ID used for listing global connection bandwidths.
instance_type	No	Array of strings	Instance type used for listing global connection bandwidths. <ul style="list-style-type: none"> ● Cloud Connect: cloud connection ● GEIP: Global EIP ● GCN: central network ● GSN: site network
binding_service	No	Array of strings	Instance type used for listing global connection bandwidths. <ul style="list-style-type: none"> ● Cloud Connect: cloud connection ● GEIP: Global EIP ● GCN: central network ● GSN: site network

Parameter	Mandatory	Type	Description
type	No	Array of strings	Bandwidth type used for listing global connection bandwidths. <ul style="list-style-type: none"> • TrsArea: cross-geographic-region bandwidth • Area: geographic-region bandwidth • SubArea: region bandwidth • Region: multi-city bandwidth
admin_state	No	Array of strings	Status used for listing global connection bandwidths. <ul style="list-style-type: none"> • NORMAL: The global connection bandwidth is available. • FREEZED: The global connection bandwidth is frozen.
charge_mode	No	Array of strings	Billing option used for listing global connection bandwidths. <ul style="list-style-type: none"> • bwd: billing by bandwidth • 95: standard 95th percentile bandwidth billing

Request Parameters

Table 4-544 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-545 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
page_info	PageInfo object	Pagination query information.

Parameter	Type	Description
globalconnection_bandwidths	Array of GlobalConnectionBandwidth objects	Response body for querying the global connection bandwidth list.

Table 4-546 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Table 4-547 GlobalConnectionBandwidth

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
domain_id	String	ID of the account that the instance belongs to.
bordercross	Boolean	Whether the global connection 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 connection 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 resource belongs to.
charge_mode	String	Billing option. By default, billing by bandwidth is enabled. Standard 95th percentile bandwidth billing is controlled using a whitelist. Value options: <ul style="list-style-type: none"> • bwd: billing by bandwidth • 95: standard 95th percentile bandwidth billing • 95avr: average daily 95th percentile bandwidth
size	Integer	Range of a global connection bandwidth, in Mbit/s. Bandwidth range: 2 Mbit/s to 300 Mbit/s
sla_level	String	Class of a global connection 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
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.
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.
local_site_code	String	Code of the local access point.

Parameter	Type	Description
remote_site_code	String	Code of s remote access point.
admin_state	String	Global connection bandwidth status. <ul style="list-style-type: none"> ● NORMAL: The bandwidth is normal. ● FREEZED: The bandwidth is frozen.
frozen	Boolean	Whether a global connection 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.
tags	Array of Tag objects	Resource tags.
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 connection 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 connection bandwidth is bound to.

Table 4-548 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 4-549 GlobalConnectionBandwidthAssociatedInstance

Parameter	Type	Description
id	String	Bound instance ID.
type	String	Bound instance type.
region_id	String	Region of the bound instance. The default value is global for global services.
project_id	String	Project ID of the bound instance.

Example Requests

Querying the global connection bandwidth list

```
GET https://{cc_endpoint}/v3/{domain_id}/gcb/gcbbandwidths
```

Example Responses

Status code: 200

The global connection 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": "site-abc",
    "remote_site_code": "site-def",
    "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.*;

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();
        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

import os
```

```
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        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{}
    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 connection bandwidth list has been queried.

Error Codes

See [Error Codes](#).

4.18.2 Creating a Global Connection Bandwidth

Function

This API is used to create a global connection bandwidth.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

POST /v3/{domain_id}/gcb/gcbandwidths

Table 4-550 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-551 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Table 4-552 Request body parameters

Parameter	Mandatory	Type	Description
globalconnection_bandwidth	Yes	CreateGlobalConnectionBandwidth object	Detailed information about a global connection bandwidth.

Table 4-553 CreateGlobalConnectionBandwidth

Parameter	Mandatory	Type	Description
name	Yes	String	Instance name.
description	No	String	Resource description. Angle brackets (<>) are not allowed.
bordercross	Yes	Boolean	Whether the global connection 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 connection 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 resource belongs to.
tags	No	Array of Tag objects	Resource tags.

Parameter	Mandatory	Type	Description
charge_mode	Yes	String	<p>Billing option. By default, billing by bandwidth is enabled. Standard 95th percentile bandwidth billing is controlled using a whitelist.</p> <p>Value options:</p> <ul style="list-style-type: none"> • bwd: billing by bandwidth • 95: standard 95th percentile bandwidth billing • 95avr: average daily 95th percentile bandwidth
size	Yes	Integer	<p>Range of a global connection bandwidth, in Mbit/s.</p> <p>Bandwidth range: 2 Mbit/s to 300 Mbit/s</p>
sla_level	No	String	<p>Class of a global connection 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
local_area	No	String	<p>Local access point. This parameter is used together with remote_area to describe the applicability of a global connection bandwidth.</p> <p>The value can contain 1 to 64 characters, including digits, letters, underscores (_), hyphens (-), and periods (.).</p> <p>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>

Parameter	Mandatory	Type	Description
remote_area	No	String	Remote access point. This parameter is used together with local_area to describe the applicability of a global connection 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.
spec_code_id	No	String	UUID of a line specification code.

Table 4-554 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 4-555 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.

Parameter	Type	Description
globalconnection_bandwidth	GlobalConnectionBandwidth object	Detailed information about a global connection bandwidth.

Table 4-556 GlobalConnectionBandwidth

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
domain_id	String	ID of the account that the instance belongs to.
bordercross	Boolean	Whether the global connection 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 connection 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 resource belongs to.

Parameter	Type	Description
charge_mode	String	<p>Billing option. By default, billing by bandwidth is enabled. Standard 95th percentile bandwidth billing is controlled using a whitelist.</p> <p>Value options:</p> <ul style="list-style-type: none"> • bwd: billing by bandwidth • 95: standard 95th percentile bandwidth billing • 95avr: average daily 95th percentile bandwidth
size	Integer	<p>Range of a global connection bandwidth, in Mbit/s.</p> <p>Bandwidth range: 2 Mbit/s to 300 Mbit/s</p>
sla_level	String	<p>Class of a global connection 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
local_area	String	<p>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.</p>
remote_area	String	<p>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.</p>
local_site_code	String	Code of the local access point.
remote_site_code	String	Code of s remote access point.
admin_state	String	<p>Global connection bandwidth status.</p> <ul style="list-style-type: none"> • NORMAL: The bandwidth is normal. • FREEZED: The bandwidth is frozen.

Parameter	Type	Description
frozen	Boolean	Whether a global connection 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.
tags	Array of Tag objects	Resource tags.
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 connection 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 connection bandwidth is bound to.

Table 4-557 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 4-558 GlobalConnectionBandwidthAssociatedInstance

Parameter	Type	Description
id	String	Bound instance ID.
type	String	Bound instance type.
region_id	String	Region of the bound instance. The default value is global for global services.
project_id	String	Project ID of the bound instance.

Example Requests

- Creating a multi-city bandwidth

POST https://{cc_endpoint}/v3/{domain_id}/gcb/gcbandwidths

```
{
  "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/gcbandwidth

```
{
  "globalconnection_bandwidth" : {
    "name" : "test_area",
    "description" : "Description",
    "bordercross" : false,
    "type" : "Area",
    "charge_mode" : "bwd",
    "size" : 5,
    "local_area" : "site-abc",
    "remote_area" : "site-def"
  }
}
```

Example Responses

Status code: 201

The global connection 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": "site-def",
"remote_site_code": "site-abc",
"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.setSize(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("site-abc")
            .withRemoteArea("site-def");
        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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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

import os
```

```
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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="site-abc",
            remote_area="site-def"
        )
        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:= "site-abc"
    remoteAreaGlobalconnectionBandwidth:= "site-def"
    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 connection bandwidth has been created.

Error Codes

See [Error Codes](#).

4.18.3 Querying a Global Connection Bandwidth

Function

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

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

GET /v3/{domain_id}/gcb/gcbbandwidths/{id}

Table 4-559 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Parameter	Mandatory	Type	Description
id	Yes	String	Instance ID.

Request Parameters

Table 4-560 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-561 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
globalconnection_bandwidth	GlobalConnectionBandwidth object	Detailed information about a global connection bandwidth.

Table 4-562 GlobalConnectionBandwidth

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
domain_id	String	ID of the account that the instance belongs to.
bordercross	Boolean	Whether the global connection 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

Parameter	Type	Description
type	String	Type of a global connection 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 resource belongs to.
charge_mode	String	Billing option. By default, billing by bandwidth is enabled. Standard 95th percentile bandwidth billing is controlled using a whitelist. Value options: <ul style="list-style-type: none"> • bwd: billing by bandwidth • 95: standard 95th percentile bandwidth billing • 95avr: average daily 95th percentile bandwidth
size	Integer	Range of a global connection bandwidth, in Mbit/s. Bandwidth range: 2 Mbit/s to 300 Mbit/s
sla_level	String	Class of a global connection 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

Parameter	Type	Description
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.
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.
local_site_code	String	Code of the local access point.
remote_site_code	String	Code of s remote access point.
admin_state	String	Global connection bandwidth status. <ul style="list-style-type: none"> ● NORMAL: The bandwidth is normal. ● FREEZED: The bandwidth is frozen.
frozen	Boolean	Whether a global connection 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.
tags	Array of Tag objects	Resource tags.
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 connection 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 connection bandwidth is bound to.

Table 4-563 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 4-564 GlobalConnectionBandwidthAssociatedInstance

Parameter	Type	Description
id	String	Bound instance ID.
type	String	Bound instance type.
region_id	String	Region of the bound instance. The default value is global for global services.
project_id	String	Project ID of the bound instance.

Example Requests

Querying a global connection bandwidth

```
GET https://{cc_endpoint}/v3/{domain_id}/gcb/gcbandwidths/{id}
```

Example Responses

Status code: 200

The global connection 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" : "site-def",
"remote_site_code" : "site-abc",
"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();
        request.withId("{id}");
        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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.id = "{id}"
        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{}
request.Id = "{id}"
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 connection bandwidth details have been queried.

Error Codes

See [Error Codes](#).

4.18.4 Updating a Global Connection Bandwidth

Function

This API is used to update a global connection bandwidth.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

PUT /v3/{domain_id}/gcb/gcbbandwidths/{id}

Table 4-565 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
id	Yes	String	Instance ID.

Request Parameters

Table 4-566 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Table 4-567 Request body parameters

Parameter	Mandatory	Type	Description
globalconnection_bandwidth	Yes	UpdateGlobalConnectionBandwidth object	Detailed information about a global connection bandwidth.

Table 4-568 UpdateGlobalConnectionBandwidth

Parameter	Mandatory	Type	Description
name	No	String	Instance name.
description	No	String	Resource description. Angle brackets (<>) are not allowed.
size	No	Integer	The amount of global connection bandwidth, in Mbit/s. Value range: 2 Mbit/s to 300 Mbit/s
charge_mode	No	String	Billing option. By default, billing by bandwidth is enabled. Standard 95th percentile bandwidth billing is controlled using a whitelist. Value options: <ul style="list-style-type: none"> • bwd: billing by bandwidth • 95: standard 95th percentile bandwidth billing • 95avr: average daily 95th percentile bandwidth

Parameter	Mandatory	Type	Description
sla_level	No	String	Class of a global connection 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
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.

Response Parameters

Status code: 200

Table 4-569 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
globalconnection_bandwidth	GlobalConnectionBandwidth object	Detailed information about a global connection bandwidth.

Table 4-570 GlobalConnectionBandwidth

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.

Parameter	Type	Description
domain_id	String	ID of the account that the instance belongs to.
bordercross	Boolean	Whether the global connection 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 connection 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 resource belongs to.
charge_mode	String	Billing option. By default, billing by bandwidth is enabled. Standard 95th percentile bandwidth billing is controlled using a whitelist. Value options: <ul style="list-style-type: none"> • bwd: billing by bandwidth • 95: standard 95th percentile bandwidth billing • 95avr: average daily 95th percentile bandwidth
size	Integer	Range of a global connection bandwidth, in Mbit/s. Bandwidth range: 2 Mbit/s to 300 Mbit/s

Parameter	Type	Description
sla_level	String	Class of a global connection 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
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.
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.
local_site_code	String	Code of the local access point.
remote_site_code	String	Code of s remote access point.
admin_state	String	Global connection bandwidth status. <ul style="list-style-type: none"> ● NORMAL: The bandwidth is normal. ● FREEZED: The bandwidth is frozen.
frozen	Boolean	Whether a global connection 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.
tags	Array of Tag objects	Resource tags.
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
enable_share	Boolean	Whether a global connection 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 connection bandwidth is bound to.

Table 4-571 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 4-572 GlobalConnectionBandwidthAssociatedInstance

Parameter	Type	Description
id	String	Bound instance ID.
type	String	Bound instance type.
region_id	String	Region of the bound instance. The default value is global for global services.
project_id	String	Project ID of the bound instance.

Example Requests

Updating a global connection 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 connection 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" : "site-def",
    "remote_site_code" : "site-abc",
    "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 connection 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();
request.withId("{id}");
UpdateGlobalConnectionBandwidthRequestBody body = new
UpdateGlobalConnectionBandwidthRequestBody();
UpdateGlobalConnectionBandwidth globalconnectionBandwidthbody = new
UpdateGlobalConnectionBandwidth();
globalconnectionBandwidthbody.withSize(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 connection bandwidth

```
# coding: utf-8

import os
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 = os.getenv("CLOUD_SDK_AK")
    sk = 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()
    request.id = "{id}"
    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 connection 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{}
    request.Id = "{id}"
    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 connection bandwidth has been updated.

Error Codes

See [Error Codes](#).

4.18.5 Deleting a Global Connection Bandwidth

Function

This API is used to delete a global connection bandwidth.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

DELETE /v3/{domain_id}/gcb/gcbandwidths/{id}

Table 4-573 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
id	Yes	String	Instance ID.

Request Parameters

Table 4-574 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

None

Example Requests

Deleting a global connection bandwidth

```
DELETE https://{cc_endpoint}/v3/{domain_id}/gcb/gcbandwidths/{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 DeleteGlobalConnectionBandwidthSolution {

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

```
DeleteGlobalConnectionBandwidthRequest();
    request.withId("{id}");
    try {
        DeleteGlobalConnectionBandwidthResponse response =
client.deleteGlobalConnectionBandwidth(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import 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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = DeleteGlobalConnectionBandwidthRequest()
        request.id = "{id}"
        response = client.delete_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.DeleteGlobalConnectionBandwidthRequest{}
    request.Id = "{id}"
    response, err := client.DeleteGlobalConnectionBandwidth(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 global connection bandwidth has been deleted.

Error Codes

See [Error Codes](#).

4.18.6 Binding a Global Connection Bandwidth to an Instance

Function

This API is used to bind a global connection bandwidth to an instance.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

POST /v3/{domain_id}/gcb/gcbbandwidths/{id}/associate-instance

Table 4-575 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
id	Yes	String	Instance ID.

Request Parameters

Table 4-576 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Table 4-577 Request body parameters

Parameter	Mandatory	Type	Description
gcbbandwidths	Yes	Array of AssociateGlobalConnectionBandwidthInstanceRequestInfo objects	Detailed information about the instance that the global connection bandwidth is bound to.

Table 4-578 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 (-).
resource_type	Yes	String	Instance type.
region_id	No	String	Region where the instance is located. If this parameter is left blank, the default value is global .

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of the region where the instance is located.

Response Parameters

Status code: 200

Table 4-579 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
gcbandwidths	Array of AssociateGlobalConnectionBandwidthInstanceResponseInfo objects	Response to the operation for binding a global connection bandwidth to an instance

Table 4-580 AssociateGlobalConnectionBandwidthInstanceResponseInfo

Parameter	Type	Description
resource_id	String	Instance ID. The ID can contain 1 to 36 characters, including letters, digits, underscores (_), and hyphens (-).
resource_type	String	Instance type.
region_id	String	Region where the instance is located. If this parameter is left blank, the default value is global .
project_id	String	Project ID of the region where the instance is located.
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.

Example Requests

Binding a global connection bandwidth to an instance

```
POST https://{cc_endpoint}/v3/{domain_id}/gcb/gcbbandwidths/{id}/associate-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 connection bandwidth has been bound to 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

Binding a global connection 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();
request.withId("{id}");
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 connection bandwidth to an instance

```
# coding: utf-8

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.id = "{id}"
```

```
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 connection 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{}  
    request.Id = "{id}"  
    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 connection bandwidth has been bound to the instance.

Error Codes

See [Error Codes](#).

4.18.7 Unbinding a Global Connection Bandwidth from an Instance

Function

This API is used to unbind a global connection bandwidth from an instance.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

POST /v3/{domain_id}/gcb/gcbandwidths/{id}/disassociate-instance

Table 4-581 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
id	Yes	String	Instance ID.

Request Parameters

Table 4-582 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Table 4-583 Request body parameters

Parameter	Mandatory	Type	Description
gcbandwidths	Yes	Array of DisassociateGlobalConnectionBandwidthInstanceRequestInfo objects	Detailed information about the instance that the global connection bandwidth is unbound from.

Table 4-584 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 (-).
resource_type	Yes	String	Instance type.
region_id	No	String	Region where the instance is located. If this parameter is left blank, the default value is global .
project_id	Yes	String	Project ID of the region where the instance is located.

Response Parameters

Status code: 200

Table 4-585 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.

Parameter	Type	Description
gcbandwidths	Array of DisassociateGlobalConnectionBandwidthInstanceResponseInfo objects	Response to the operation for unbinding a global connection bandwidth from an instance.

Table 4-586 DisassociateGlobalConnectionBandwidthInstanceResponseInfo

Parameter	Type	Description
resource_id	String	Instance ID. The ID can contain 1 to 36 characters, including letters, digits, underscores (_), and hyphens (-).
resource_type	String	Instance type.
region_id	String	Region where the instance is located. If this parameter is left blank, the default value is global .
project_id	String	Project ID of the region where the instance is located.
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.

Example Requests

Unbinding a global connection bandwidth from an instance

```
POST https://{cc_endpoint}/v3/{domain_id}/gcb/gcbbandwidths/{id}/disassociate-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 connection bandwidth has been unbound from 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

Unbinding a global connection 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();
        request.withId("{id}");
        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 connection bandwidth from an instance

```
# coding: utf-8

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.id = "{id}"
        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 connection 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{}
    request.Id = "{id}"
    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 connection bandwidth has been unbound from the instance.

Error Codes

See [Error Codes](#).

4.18.8 Querying the List of Global Connection Bandwidths That Meet the Binding Conditions

Function

This API is used to query the list of global connection 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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

GET /v3/{domain_id}/gcb/gcbbandwidths/support-bindings

Table 4-587 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-588 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 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.
enterprise_project_id	No	Array of strings	Enterprise project IDs.
local_area	No	String	Local access point. <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>

Parameter	Mandatory	Type	Description
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>
binding_service	No	String	<p>Instance type used for listing global connection bandwidths.</p> <ul style="list-style-type: none"> Cloud Connect: cloud connection GEIP: Global EIP GCN: central network GSN: site network

Request Parameters

Table 4-589 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-590 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
page_info	PageInfo object	Pagination query information.
globalconnection_bandwidths	Array of GlobalConnectionBandwidth objects	Response body for querying the global connection bandwidth list.

Table 4-591 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Table 4-592 GlobalConnectionBandwidth

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
description	String	Resource description. Angle brackets (<>) are not allowed.
domain_id	String	ID of the account that the instance belongs to.
bordercross	Boolean	Whether the global connection 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

Parameter	Type	Description
type	String	Type of a global connection 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 resource belongs to.
charge_mode	String	Billing option. By default, billing by bandwidth is enabled. Standard 95th percentile bandwidth billing is controlled using a whitelist. Value options: <ul style="list-style-type: none"> • bwd: billing by bandwidth • 95: standard 95th percentile bandwidth billing • 95avr: average daily 95th percentile bandwidth
size	Integer	Range of a global connection bandwidth, in Mbit/s. Bandwidth range: 2 Mbit/s to 300 Mbit/s
sla_level	String	Class of a global connection 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

Parameter	Type	Description
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.
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.
local_site_code	String	Code of the local access point.
remote_site_code	String	Code of s remote access point.
admin_state	String	Global connection bandwidth status. <ul style="list-style-type: none"> ● NORMAL: The bandwidth is normal. ● FREEZED: The bandwidth is frozen.
frozen	Boolean	Whether a global connection 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.
tags	Array of Tag objects	Resource tags.
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 connection 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 connection bandwidth is bound to.

Table 4-593 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 4-594 GlobalConnectionBandwidthAssociatedInstance

Parameter	Type	Description
id	String	Bound instance ID.
type	String	Bound instance type.
region_id	String	Region of the bound instance. The default value is global for global services.
project_id	String	Project ID of the bound instance.

Example Requests

Querying the list of global connection bandwidths that meet the binding conditions

```
GET https://{cc_endpoint}/v3/{domain_id}/gcb/gcbbandwidths/support-bindings?
binding_service=CC&local_area=site-def&remote_area=site-abc
```

Example Responses

Status code: 200

The global connection 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": "site-def",
"remote_site_code": "site-abc",
"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.*;

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();
        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();
        }
    }
}
```

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

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import 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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        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{}
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 connection bandwidth list has been queried.

Error Codes

See [Error Codes](#).

4.18.9 Querying the Tenant Configuration of a Global Connection Bandwidth

Function

This API is used to query the tenant configuration of a global connection bandwidth.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

GET /v3/{domain_id}/gcb/configs

Table 4-595 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-596 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-597 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
configs	ListGlobalConnectionBandwidthConfigs object	Dynamic configuration items for purchasing a global connection bandwidth.

Table 4-598 ListGlobalConnectionBandwidthConfigs

Parameter	Type	Description
size_range	Array of GlobalConnectionBandwidthSizeRange objects	Bandwidth range of global connection bandwidths by billing option.
charge_mode	Array of strings	List of supported billing options.
services	Array of strings	Instance type.
gcb_type	Array of strings	Bandwidth type.
ratio_95peak_plus	Integer	Percentage of the minimum bandwidth in enhanced 95th percentile bandwidth billing.

Parameter	Type	Description
ratio_95peak_guar	Integer	Percentage of the minimum bandwidth in standard 95th percentile bandwidth billing.
crossborder	Boolean	Whether a cross-border permit is approved.
quotas	Array of GlobalConnectionBandwidthQuotas objects	Quota information.
sla_level	Array of strings	Line grade.
bind_limit	Integer	Maximum number of instances that are allowed to use a shared bandwidth.
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 4-599 GlobalConnectionBandwidthSizeRange

Parameter	Type	Description
type	String	Billing option of a global connection bandwidth. Value options: <ul style="list-style-type: none"> • bwd: billing by bandwidth • 95: standard 95th percentile bandwidth billing • 95avr: average daily 95th percentile bandwidth
min	Integer	Minimum global connection bandwidth, in Mbit/s.
max	Integer	Maximum global connection bandwidth, in Mbit/s.

Table 4-600 GlobalConnectionBandwidthQuotas

Parameter	Type	Description
quota	Integer	Quotas.
used	Integer	Used quotas.
type	String	Quota type. <ul style="list-style-type: none">• gcb.size: global connection bandwidth range• gcb.count: number of global connection bandwidths

Example Requests

Querying the tenant configuration of a global connection bandwidth

```
GET https://{cc_endpoint}/v3/{domain_id}/gcb/configs
```

Example Responses

Status code: 200

The tenant configuration of the global connection bandwidth has been queried.

```
{
  "request_id": "61126320a1802d5c6444f9d2d76526c2",
  "configs": {
    "size_range": [ {
      "min": 2,
      "max": 300,
      "type": "bwd"
    } ],
    "charge_mode": [ "bwd", 95, "95avr" ],
    "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

import os
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 = os.getenv("CLOUD_SDK_AK")
    sk = 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 tenant configuration of the global connection bandwidth has been queried.

Error Codes

See [Error Codes](#).

4.18.10 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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

GET /v3/{domain_id}/gcb/spec-codes

Table 4-601 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-602 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 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.
id	No	Array of arrays	Resource ID. Multiple IDs can be queried.
local_area	No	String	Local access point code included in the line specification.
remote_area	No	String	Remote access point code included in the line specification.
level	No	Array of strings	Bandwidth class. <ul style="list-style-type: none"> ● Pt: Platinum ● Au: Gold ● Ag: Silver

Request Parameters

Table 4-603 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-604 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
page_info	PageInfo object	Pagination query information.
spec_codes	Array of GlobalConnectionBandwidthSpecCode objects	Response body for querying the line specification list.

Table 4-605 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Table 4-606 GlobalConnectionBandwidthSpecCode

Parameter	Type	Description
id	String	Instance ID.
local_area	String	Local access point. This parameter is used together with remote_area to describe the applicability of a global connection 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.

Parameter	Type	Description
remote_area	String	Remote access point. This parameter is used together with local_area to describe the applicability of a global connection 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.
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.
name_en	String	Line specification in English.
level	String	Line grade. <ul style="list-style-type: none"> ● Pt: Platinum ● Au: Gold ● Ag: Silver
sku	String	Product code of specific global connection bandwidth line specifications.
size	Integer	Minimum bandwidth for sale, in Mbit/s.

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" : "site-abc",
"remote_area" : "site-def",
"level" : "Ag",
"sku" : "abc_def_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.*;

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();
        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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        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{}
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](#).

4.18.11 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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

GET /v3/{domain_id}/gcb/sites

Table 4-607 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-608 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 1 to 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.
id	No	Array of arrays	Resource ID. Multiple IDs can be queried.
name_en	No	String	User-defined site information in English.
name_cn	No	String	User-defined site information in Chinese.
site_code	No	String	Site code.
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 4-609 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-610 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
page_info	PageInfo object	Pagination query information.
site_infos	Array of GlobalConnectionBandwidthSites objects	Response body for querying the site list.

Table 4-611 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Table 4-612 GlobalConnectionBandwidthSites

Parameter	Type	Description
id	String	Instance ID.
description	String	Resource description. Angle brackets (<>) are not allowed.
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
name_cn	String	User-defined site name in English. Value range: 1 to 64 characters

Parameter	Type	Description
site_code	String	Site code in the format of <area_code>[-<subarea_code>[-<region_code>]]. Value range: 1 to 64 characters
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
service_list	String	List of services supported at the site. Multiple services are separated by commas (,). Value range: 0 to 255 characters
group_list	Array of SiteGroupReferenceInfo objects	Data model for association between site groups and external systems.
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
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

Table 4-613 SiteGroupReferenceInfo

Parameter	Type	Description
id	String	Instance ID.
description	String	Resource description. Angle brackets (<>) are not allowed.
name_en	String	User-defined site group name in English. Value range: 1 to 255 characters

Parameter	Type	Description
name_cn	String	User-defined site group name in Chinese. Value range: 1 to 64 characters

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" : "Site abc",
    "name_en" : "site-abc",
    "site_code" : "site-abc",
    "site_type" : "Region",
    "service_list" : "CC,GEIP",
    "region_id" : "region-abc",
    "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.*;
```

```
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();
        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

import os
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 = os.getenv("CLOUD_SDK_AK")
    sk = 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()
        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{}
    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](#).

4.18.12 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.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

GET /v3/{domain_id}/gcb/line-levels

Table 4-614 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-615 Query Parameters

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

Parameter	Mandatory	Type	Description
id	No	Array of arrays	Resource ID. Multiple IDs can be queried.
local_area	No	String	Local access point code included in the line specification.
remote_area	No	String	Remote access point code included in the line specification.
levels	No	Array of strings	Bandwidth class. <ul style="list-style-type: none"> • Pt: Platinum • Ag: Silver

Request Parameters

Table 4-616 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.

Response Parameters

Status code: 200

Table 4-617 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
page_info	PageInfo object	Pagination query information.
line_levels	Array of GlobalConnectio nBandwidthLineL evel objects	Response body for querying the line grade list.

Table 4-618 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.

Parameter	Type	Description
previous_marker	String	Forward pagination identifier.
current_count	Integer	Number of the resources in the current list.

Table 4-619 GlobalConnectionBandwidthLineLevel

Parameter	Type	Description
id	String	Instance ID.
description	String	Resource description. Angle brackets (<>) are not allowed.
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.
remote_area	String	Remote access point.
levels	Array of strings	Line grade. There are three options: platinum, gold, and silver.

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" : "site-abc",
    "remote_area" : "site-def",
    "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.*;  
  
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();  
        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  
import os
```

```
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        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{}
    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](#).

4.19 Global Connection Bandwidth Tag Management

4.19.1 Querying a Global Connection Bandwidth Tag in an Account

Function

This API is used to query a global connection bandwidth tag in an account.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

GET /v3/gcb/{resource_id}/tags

Table 4-620 Path Parameters

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Unique identifier of a resource.

Request Parameters

Table 4-621 Request header parameters

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

Response Parameters

Status code: 200

Table 4-622 Response body parameters

Parameter	Type	Description
tags	Array of Tag objects	Tag list.
request_id	String	Request ID.

Table 4-623 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 a global connection bandwidth tag in an account

```
GET https://{cc_endpoint}/v3/gcb/{resource_id}/tags
```

Example Responses

Status code: 200

The global connection 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.v3.region.CcRegion;  
import com.huaweicloud.sdk.cc.v3.*;  
import com.huaweicloud.sdk.cc.v3.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();  
        request.withResourceId("{resource_id}");  
        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  
  
import os  
from huaweicloudsdkcore.auth.credentials import GlobalCredentials  
from huaweicloudsdccc.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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.resource_id = "{resource_id}"
        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/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.ListGcbResourceTagsRequest{}
    request.ResourceId = "{resource_id}"
    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 connection bandwidth tag has been queried.

Error Codes

See [Error Codes](#).

4.19.2 Adding a Tag to a Global Connection Bandwidth

Function

This API is used to add a tag to a global connection bandwidth.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

POST /v3/gcb/{resource_id}/tags

Table 4-624 Path Parameters

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Unique identifier of a resource.

Request Parameters

Table 4-625 Request header parameters

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

Table 4-626 Request body parameters

Parameter	Mandatory	Type	Description
tag	Yes	RequiredTag object	Resource tag, which is a key-value pair.

Table 4-627 RequiredTag

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

Response Parameters

None

Example Requests

Adding a tag to a global connection 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 connection 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.v3.region.CcRegion;
import com.huaweicloud.sdk.v3.*;
import com.huaweicloud.sdk.v3.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();
        request.withResourceid("{resource_id}");
        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 connection bandwidth

```
# coding: utf-8

import os
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 = os.getenv("CLOUD_SDK_AK")
    sk = 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()
    request.resource_id = "{resource_id}"
    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 connection 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.CreateGcbResourceTagRequest{}
    request.ResourceId = "{resource_id}"
    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 global connection bandwidth tag has been added.

Error Codes

See [Error Codes](#).

4.19.3 Deleting a Tag from a Global Connection Bandwidth

Function

This API is used to delete a tag from a global connection bandwidth.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

DELETE /v3/gcb/{resource_id}/tags/{tag_key}

Table 4-628 Path Parameters

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Unique identifier of a resource.
tag_key	Yes	String	Key of the tag to be deleted.

Request Parameters

Table 4-629 Request header parameters

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

Response Parameters

None

Example Requests

Deleting a tag from a global connection bandwidth

```
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.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.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();
        request.withResourceId("{resource_id}");
        request.withTagKey("{tag_key}");
        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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.resource_id = "{resource_id}"
        request.tag_key = "{tag_key}"
        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/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.DeleteGcbResourceTagRequest{}
request.ResourceId = "{resource_id}"
request.TagKey = "{tag_key}"
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 global connection bandwidth tag has been deleted.

Error Codes

See [Error Codes](#).

4.19.4 Adding Tags to a Global Connection Bandwidth

Function

This API is used to add tags to a global connection bandwidth.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

POST /v3/gcb/{resource_id}/tags/create

Table 4-630 Path Parameters

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Unique identifier of a resource.

Request Parameters

Table 4-631 Request header parameters

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

Table 4-632 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of RequiredTag objects	Resource tags to be added or deleted.

Table 4-633 RequiredTag

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

Response Parameters

None

Example Requests

Adding tags to a global connection 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 connection 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.*;

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();
        request.withResourceId("{resource_id}");
        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 connection bandwidth

```
# coding: utf-8

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
        request.resource_id = "{resource_id}"
        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 connection 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.BatchCreateGcbResourceTagsRequest{}
request.ResourceId = "{resource_id}"
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	The global connection bandwidth tags have been added.

Error Codes

See [Error Codes](#).

4.19.5 Deleting Tags from a Global Connection Bandwidth

Function

This API is used to delete tags from a global connection bandwidth.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

POST /v3/gcb/{resource_id}/tags/delete

Table 4-634 Path Parameters

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Unique identifier of a resource.

Request Parameters

Table 4-635 Request header parameters

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

Table 4-636 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of RequiredTag objects	Resource tags to be added or deleted.

Table 4-637 RequiredTag

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

Response Parameters

None

Example Requests

Deleting tags from a global connection 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 connection 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.*;

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();
request.withResourceId("{resource_id}");
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.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

Deleting tags from a global connection bandwidth

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdckcc.v3.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdckcc.v3 import *

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

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = BatchDeleteGcbResourceTagsRequest()
        request.resource_id = "{resource_id}"
        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 connection 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.BatchDeleteGcbResourceTagsRequest{}
    request.ResourceId = "{resource_id}"
    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	The global connection bandwidth tags have been deleted.

Error Codes

See [Error Codes](#).

4.19.6 Querying the Number of Global Connection Bandwidth Tags in an Account

Function

This API is used to query the number of global connection bandwidth tags in an account.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

POST /v3/gcb/resource-instances/count

Request Parameters

Table 4-638 Request header parameters

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

Table 4-639 Request body parameters

Parameter	Mandatory	Type	Description
request_id	No	String	Request ID.
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 and each value of the same tag key must be unique. The response returns resources 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 searching condition is specified, full data is returned.
tags_any	No	Array of QueryTag objects	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 and each value of the same tag key must be unique. The response returns resources 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 searching condition is specified, full data is returned.

Parameter	Mandatory	Type	Description
not_tags	No	Array of QueryTag objects	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. Keys must be unique and values of a 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 searching condition is specified, full data is returned.
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. Keys must be unique and values of a 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 filtering criteria is specified, full data is returned.
matches	No	Array of TmsMatch objects	Whether to match the tags: The tag key must be 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.

Table 4-640 QueryTag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key.
values	Yes	Array of strings	List of tag values.

Table 4-641 TmsMatch

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key, Currently, only resource_name is supported. Other key values will be available later.
value	Yes	String	Tag value.

Response Parameters

Status code: 200

Table 4-642 Response body parameters

Parameter	Type	Description
total_count	Integer	Total records.
request_id	String	Request ID.

Example Requests

Querying the number of global connection 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 connection 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 connection 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.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 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 connection bandwidth tags in an account

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkcc.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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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 connection 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/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.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 connection bandwidth tags in an account has been queried.

Error Codes

See [Error Codes](#).

4.19.7 Querying the List of Global Connection Bandwidths in an Account

Function

This API is used to query the list of global connection bandwidths in an account.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

POST /v3/gcb/resource-instances/filter

Table 4-643 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records to be queried.
offset	No	Integer	Index offset.

Request Parameters

Table 4-644 Request header parameters

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

Table 4-645 Request body parameters

Parameter	Mandatory	Type	Description
request_id	No	String	Request ID.
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.

Parameter	Mandatory	Type	Description
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 and each value of the same tag key must be unique. The response returns resources 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 searching condition is specified, full data is returned.
tags_any	No	Array of QueryTag objects	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 and each value of the same tag key must be unique. The response returns resources 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 searching condition is specified, full data is returned.

Parameter	Mandatory	Type	Description
not_tags	No	Array of QueryTag objects	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. Keys must be unique and values of a 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 searching condition is specified, full data is returned.
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. Keys must be unique and values of a 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 filtering criteria is specified, full data is returned.
matches	No	Array of TmsMatch objects	Whether to match the tags: The tag key must be 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.

Table 4-646 QueryTag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key.
values	Yes	Array of strings	List of tag values.

Table 4-647 TmsMatch

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key, Currently, only resource_name is supported. Other key values will be available later.
value	Yes	String	Tag value.

Response Parameters

Status code: 200

Table 4-648 Response body parameters

Parameter	Type	Description
resources	Array of TmsResource objects	Resource list.
total_count	Integer	Total records.
request_id	String	Request ID.

Table 4-649 TmsResource

Parameter	Type	Description
resource_id	String	Resource ID.
tags	Array of Tag objects	Tag list. If there is no tag added for the instance, an empty array is returned.
resource_name	String	Resource name. This parameter is an empty string by default if there is no resource name.

Table 4-650 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 list of global connection bandwidths 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 list of global connection bandwidths 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 list of global connection bandwidths 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.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 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();
        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 list of global connection bandwidths in an account

```
# coding: utf-8

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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()
listMatchesbody = [
    TrmsMatch(
        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 list of global connection bandwidths 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/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.ListGcbResourceByTagRequest{}  
    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 list of global connection bandwidths in an account has been queried.

Error Codes

See [Error Codes](#).

4.19.8 Querying All Global Connection Bandwidth Tags in an Account

Function

This API is used to query all global connection bandwidth tags in an account.

Debugging

You can debug this API through automatic authentication in [API Explorer](#) or use the SDK sample code generated by API Explorer.

URI

GET /v3/gcb/tags

Request Parameters

Table 4-651 Request header parameters

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

Response Parameters

Status code: 200

Table 4-652 Response body parameters

Parameter	Type	Description
tags	Array of TmsTagValues objects	Tag list
total_count	Integer	Total records.
request_id	String	Request ID.

Table 4-653 TmsTagValues

Parameter	Type	Description
key	String	Tag key,
values	Array of strings	List of tag values.

Example Requests

Querying all global connection bandwidth tags in an account

```
GET https://{cc_endpoint}/v3/gcb/tags
```

Example Responses

Status code: 200

All global connection 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.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.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

import os
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 = os.environ["CLOUD_SDK_AK"]
sk = os.environ["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/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.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 connection bandwidth tags in an account have been queried.

Error Codes

See [Error Codes](#).

5 Permissions and Supported Actions

5.1 Introduction

You can use Identity and Access Management (IAM) for fine-grained permissions management of your Cloud Connect resources. If your HUAWEI ID does not need individual IAM users, you can skip this topic.

With IAM, you can control access to specific cloud resources. IAM supports role/policy-based authorization and identity policy-based authorization.

The following table describes the differences between the two authorization models.

Table 5-1 Differences between role/policy-based and identity policy-based authorization

Authorization Model	Authorization Using	Permissions	Authorization Method	Scenario
Role/Policy	User-permission-authorization scope	<ul style="list-style-type: none"> System-defined roles System-defined policies Custom policies 	Assigning roles or policies to principals	To authorize a user, you need to add it to a user group first and then specify the scope of authorization. It is hard to provide fine-grained permissions control using authorization by user groups and a limited number of condition keys. This method is suitable for small- and medium-sized enterprises.

Authorization Model	Authorization Using	Permissions	Authorization Method	Scenario
Identity policy	User-policy	<ul style="list-style-type: none"> System-defined identity policies Custom identity policies 	<ul style="list-style-type: none"> Assigning identity policies to principals Attaching identity policies to principals 	You can authorize a user by attaching an identity policy to it. User-specific authorization and a variety of key conditions allow for more fine-grained permissions control. However, this model can be hard to set up. It requires a certain amount of expertise and is suitable for medium- and large-sized enterprises.

Assume that you want to grant IAM users the permissions needed to create ECSs in CN North-Beijing4 and OBS buckets in CN South-Guangzhou. With role/policy-based authorization, the administrator needs to create two custom policies and assign both to the IAM users. With identity policy-based authorization, the administrator only needs to create one custom identity policy and configure the condition key **g:RequestedRegion** for the policy, and attach the policy to the users or grant the users the access permissions to the specified regions. Identity policy-based authorization is more flexible than role/policy-based authorization.

Policies and actions in the two authorization models are not interoperable. You are advised to use the identity policy-based authorization model.

If you use IAM users in your account to call an API, the IAM users must be granted the required permissions. The permissions required for calling an API are determined by the actions supported by the API. Only users who have been granted permissions allowing the actions can call the API successfully.

Assume that an IAM user wants to call an API to query cloud connections. With role/policy-based authorization, the IAM user must be granted the permissions allowing for action **cc:cloudConnections:list**. With identity policy-based authorization, the IAM user must be granted the permissions allowing for action **cc:cloudConnections:list**.

5.2 Actions Supported by Policy-based Authorization

This topic describes the actions supported by Cloud Connect in policy-based authorization.

Supported Actions

Cloud Connect provides system-defined policies that can be directly used in IAM. You can also create custom policies to supplement system-defined policies for

more refined access control. Operations supported by policies are specific to APIs. The following are common concepts related to policies:

- **Permissions:** allow or deny operations on specified resources under specific conditions.
- **APIs:** REST APIs that can be called by a user who has been granted specific permissions.
- **Actions:** specific operations that are allowed or denied.
- **Related actions:** actions on which a specific action depends to take effect. When assigning permissions for the action to a user, you also need to assign permissions for the related actions.
- **IAM or enterprise projects:** type of projects for which an action will take effect. Policies that contain actions for both IAM and enterprise projects can be used and take effect for both IAM and Enterprise Management. Policies that only contain actions for IAM projects can be used and only take effect for IAM. Administrators can check whether an action supports IAM projects or enterprise projects in the action list. "√" indicates that the action supports the project and "×" indicates that the action does not support the project. For details about the differences between IAM and enterprise management, see [What Are the Differences Between IAM and Enterprise Management?](#)

Cloud Connect supports the following actions in custom policies:

- **Cloud Connections:** actions supported by all cloud connection APIs, such as the APIs for creating, updating, deleting a cloud connection, querying cloud connection details, and querying the cloud connection list
- **Network Instances:** actions supported by all network instance APIs, such as the APIs for creating, updating, removing a network instance, querying network instance details, and querying the network instance list
- **Bandwidth Packages:** actions supported by all bandwidth package APIs, such as creating, updating, and deleting a bandwidth package, querying bandwidth package details, querying the bandwidth package list, binding a bandwidth package to a cloud connection, and unbinding a bandwidth package from a cloud connection
- **Inter-Region Bandwidths:** actions supported by all inter-region bandwidth APIs, such as the APIs for assigning, updating, deleting an inter-region bandwidth, querying inter-region bandwidth details, and querying the inter-region bandwidth
- **Cloud Connection Routes:** actions supported by all cloud connection route APIs, such as the APIs for querying cloud connection route details and querying cloud connection routes
- **Central Networks:** actions supported by all central network APIs, such as the APIs for creating, updating, and deleting a central network, querying central network details, and querying the central network list
- **Central Network Policies:** actions supported by all central network policy APIs, such as the APIs for adding, applying, deleting a central network policy, querying central network policy details, querying the central network policy list, and querying policy changes
- **Central Network Connections:** actions supported by all central network connection APIs, such as the APIs for querying the central network connection list and updating a central network connection

- Central Network Attachments:** actions supported for all central network attachment APIs, such as the APIs for adding a global DC gateway as an attachment, updating a global DC gateway on a central network, querying attachment details, querying the global DC gateway list, removing an attachment from a central network, and querying the attachments on a central network

Cloud Connections

Table 5-2 Actions supported for cloud connections

Permissi on	API	Action	Related Action	IAM Project	Enterprise Project
Creating a cloud connection	POST /v3/{domain_id}/ccaas/cloud-connections	cc:cloudConnections: create	-	√	√
Updating a cloud connection	PUT /v3/{domain_id}/ccaas/cloud-connections/{id}	cc:cloudConnections: update	-	√	√
Deleting a cloud connection	DELETE /v3/{domain_id}/ccaas/cloud-connections/{id}	cc:cloudConnections: delete	-	√	√
Querying cloud connection details	GET /v3/{domain_id}/ccaas/cloud-connections/{id}	cc:cloudConnections: get	-	√	√
Querying the cloud connection list	GET /v3/{domain_id}/ccaas/cloud-connections	cc:cloudConnections: list	-	√	√

Network Instances

Table 5-3 Actions supported for network instances

Permission	API	Action	Related Action	IAM Project	Enterprise Project
Creating a network instance	POST /v3/{domain_id}/ccaas/network-instances	cc:networkInstances:create	-	√	×
Updating a network instance	PUT /v3/{domain_id}/ccaas/network-instances/{id}	cc:networkInstances:update	-	√	×
Removing a network instance	DELETE /v3/{domain_id}/ccaas/network-instances/{id}	cc:networkInstances:delete	-	√	×
Querying network instance details	GET /v3/{domain_id}/ccaas/network-instances/{id}	cc:networkInstances:get	-	√	×
Querying the network instance list	GET /v3/{domain_id}/ccaas/network-instances	cc:networkInstances:list	-	√	×

Bandwidth Packages

Table 5-4 Actions supported for bandwidth packages

Permission	API	Action	Related Action	IAM Project	Enterprise Project
Requesting a bandwidth package	POST /v3/{domain_id}/ccaas/bandwidth-packages	cc:bandwidthPackages:create	-	√	√
Updating a bandwidth package	PUT /v3/{domain_id}/ccaas/bandwidth-packages/{id}	cc:bandwidthPackages:update	-	√	√

Permission	API	Action	Related Action	IAM Project	Enterprise Project
Deleting a bandwidth package	DELETE /v3/{domain_id}/ccaas/bandwidth-packages/{id}	cc:bandwidthPackages:delete	-	√	√
Querying bandwidth package details	GET /v3/{domain_id}/ccaas/bandwidth-packages/{id}	cc:bandwidthPackages:get	-	√	√
Querying the bandwidth package list	GET /v3/{domain_id}/ccaas/bandwidth-packages	cc:bandwidthPackages:list	-	√	√
Binding a bandwidth package	POST /v3/{domain_id}/ccaas/bandwidth-packages/{id}/associate	cc:bandwidthPackages:associate	-	√	√
Unbinding a bandwidth package	POST /v3/{domain_id}/ccaas/bandwidth-packages/disassociate	cc:bandwidthPackages:disassociate	-	√	√

Inter-Region Bandwidths

Table 5-5 Actions supported for inter-region bandwidths

Permission	API	Action	Related Action	IAM Project	Enterprise Project
Assigning an inter-region bandwidth	POST /v3/{domain_id}/ccaas/inter-region-bandwidths	cc:interRegionBandwidths:create	-	√	×

Permission	API	Action	Related Action	IAM Project	Enterprise Project
Updating an inter-region bandwidth	PUT /v3/{domain_id}/ccaas/inter-region-bandwidths/{id}	cc:interRegionBandwidths:update	-	√	×
Deleting an inter-region bandwidth	DELETE /v3/{domain_id}/ccaas/inter-region-bandwidths/{id}	cc:interRegionBandwidths:delete	-	√	×
Querying inter-region bandwidth details	GET /v3/{domain_id}/ccaas/inter-region-bandwidths/{id}	cc:interRegionBandwidths:get	-	√	×
Querying the inter-region bandwidth list	GET /v3/{domain_id}/ccaas/inter-region-bandwidths	cc:interRegionBandwidths:list	-	√	×

Cloud Connection Routes

Table 5-6 Actions supported for cloud connection routes

Permission	API	Action	Related Action	IAM Project	Enterprise Project
Querying cloud connection route details	GET /v3/{domain_id}/ccaas/cloud-connection-routes/{id}	cc:cloudConnectionRoutes:get	-	√	×
Querying cloud connection routes	GET /v3/{domain_id}/ccaas/cloud-connection-routes	cc:cloudConnectionRoutes:list	-	√	×

Central Networks

Table 5-7 Actions supported for central networks

Permission	API	Action	Related Action	IAM Project	Enterprise Project
Creating a central network	POST /v3/{domain_id}/gcn/central-networks	cc:central Network:create	-	√	√
Updating a central network	PUT /v3/{domain_id}/gcn/central-networks/{central_network_id}	cc:central Network:update	-	√	√
Deleting a central network	DELETE /v3/{domain_id}/gcn/central-networks/{central_network_id}	cc:central Network:delete	-	√	√
Querying central network details	GET /v3/{domain_id}/gcn/central-networks/{central_network_id}	cc:central Network:get	-	√	√
Querying the central network list	GET /v3/{domain_id}/gcn/central-networks	cc:central Network:list	-	√	√

Central Network Policies

Table 5-8 Actions supported for central network policies

Permission	API	Action	Related Action	IAM Project	Enterprise Project
Adding a central network policy	POST /v3/{domain_id}/gcn/central-network/{central_network_id}/policies	cc:centralNetwork:createPolicy	-	√	√
Applying a central network policy	POST /v3/{domain_id}/gcn/central-network/{central_network_id}/policies/{policy_id}/apply	cc:centralNetwork:applyPolicy	-	√	√
Deleting a central network policy	DELETE /v3/{domain_id}/gcn/central-network/{central_network_id}/policies/{policy_id}	cc:centralNetwork:deletePolicy	-	√	√
Querying the central network list	GET /v3/{domain_id}/gcn/central-network/{central_network_id}/policies	cc:centralNetwork:listPolicies	-	√	√
Querying policy changes	GET /v3/{domain_id}/gcn/central-network/{central_network_id}/policies/{policy_id}/change-set	cc:centralNetwork:listChangeSet	-	√	√

Central Network Connections

Table 5-9 Actions supported for central network connections

Permission	API	Action	Related Action	IAM Project	Enterprise Project
Querying the central network connection list	GET /v3/{domain_id}/gcn/central-network/{central_network_id}/connections	cc:centralNetwork:listConnections	-	√	√
Updating a central network connection	PUT /v3/{domain_id}/gcn/central-network/{central_network_id}/connections/{connection_id}	cc:centralNetwork:updateConnection	-	√	√

Central Network Attachments

Table 5-10 Actions supported for central network attachments

Permission	API	Action	Related Action	IAM Project	Enterprise Project
Adding a global DC gateway to a central network as an attachment	POST /v3/{domain_id}/gcn/central-network/{central_network_id}/gdgw-attachments	cc:centralNetworkAttachment:createGdgw	-	√	√
Updating a global DC gateway on a central network	PUT /v3/{domain_id}/gcn/central-network/{central_network_id}/gdgw-attachments/{gdgw_attachment_id}	cc:centralNetworkAttachment:updateGdgw	-	√	√

Permission	API	Action	Related Action	IAM Project	Enterprise Project
Querying 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}	cc:centralNetworkAttachment:getGdgw	-	√	√
Querying the global DC gateways on a central network	GET /v3/{domain_id}/gcn/central-network/{central_network_id}/gdgw-attachments	cc:centralNetworkAttachment:listGdgws	-	√	√
Removing an attachment from a central network	DELETE /v3/{domain_id}/gcn/central-network/{central_network_id}/attachments/{attachment_id}	cc:centralNetworkAttachment:delete	-	√	√
Querying the attachments on a central network	GET /v3/{domain_id}/gcn/central-network/{central_network_id}/attachments	cc:centralNetworkAttachment:list	-	√	√

6 Appendix

6.1 Status Codes

- Normal

Table 6-1 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 6-2 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.

6.2 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.

6.3 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/a4adasfjljaaaakla12334jklga9sasfg"
      },
      "id": "a4adasfjljaaaakla12334jklga9sasfg",
      "enabled": true
    }
  ],
  "links": {
    "next": null,
    "previous": null,
    "self": "https://www.example.com/v3/projects"
  }
}
```

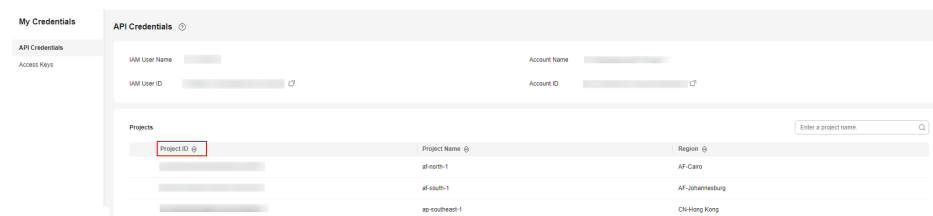
Obtain a Project ID from the Console

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 6-1 Viewing the project ID



7 Historical APIs

7.1 Tag Management

7.1.1 Querying All Tags by Resource Type

Function

This API is used to query all the tags by resource type. This API is a historical API. You are advised to use the APIs described in "Querying the Tags Added to a Cloud Connection" and "Querying the Tags of a Bandwidth Package".

Calling Method

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

URI

GET /v3/{domain_id}/ccaas/{resource_type}/tags

Table 7-1 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 7-2 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 102400

Response Parameters

Status code: 200

Table 7-3 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 7-4 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  
  
import os  
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 = os.environ["CLOUD_SDK_AK"]  
    sk = os.environ["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](#).

7.1.2 Deleting a Resource Tag

Function

This API is used to delete a resource tag. This API is a historical API. You are advised to use the APIs described in "Deleting a Tag from a Cloud Connection" and "Deleting a Tag from a Bandwidth Package".

Calling Method

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

URI

DELETE /v3/{domain_id}/ccaas/{resource_type}/{resource_id}/tags/{tag_key}

Table 7-5 Path Parameters

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

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Resource ID. Minimum: 0 Maximum: 36
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 7-6 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

import os
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 = os.getenv("CLOUD_SDK_AK")
    sk = 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](#).

7.1.3 Batch Creating or Deleting Tags

Function

This API is used to add or delete tags in batches. This API is a historical API. You are advised to use the APIs described in "Adding a Tag to a Cloud Connection", "Adding a Tag to a Bandwidth Package", "Deleting a Tag from a Cloud Connection", and "Deleting a Tag from a Bandwidth Package".

Calling Method

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

URI

POST /v3/{domain_id}/ccaas/{resource_type}/{resource_id}/tags/action

Table 7-7 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 7-8 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 102400

Table 7-9 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 7-10 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);
body.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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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](#).

7.1.4 Querying Resources

Function

This API is used to query resources. This API is a historical API. You are advised to use the APIs described in "Querying Cloud Connections by Tag" and "Querying Bandwidth Packages by Tag".

Calling Method

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

URI

POST /v3/{domain_id}/ccaas/{resource_type}/resource-instances/action

Table 7-11 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 7-12 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 102400

Table 7-13 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
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 7-14 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 7-15 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

Status code: 200

Table 7-16 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 7-17 FilterTagResource

Parameter	Type	Description
resource_id	String	Resource ID. Minimum: 0 Maximum: 36
resource_name	String	Resource name. Minimum: 0 Maximum: 64

Parameter	Type	Description
resource_detail	String	Resource details. Minimum: 0 Maximum: 255
tags	Array of Tag objects	Tags added for a resource. Array Length: 0 - 20

Table 7-18 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": "resoucee1",  
    "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

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudskcc.v2.region.cc_region import CcRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudskcc.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 = os.environ["CLOUD_SDK_AK"]
sk = os.environ["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
```

```
import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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](#).

7.1.5 Querying Resource Tags

Function

This API is used to query tags of a resource. This API is a historical API. You are advised to use the APIs described in "Querying the Tags Added to a Cloud Connection" and "Querying the Tags of a Bandwidth Package".

Calling Method

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

URI

GET /v3/{domain_id}/ccaas/{resource_type}/{resource_id}/tags

Table 7-19 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 7-20 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 102400

Response Parameters

Status code: 200

Table 7-21 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 7-22 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

import os
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 = os.getenv("CLOUD_SDK_AK")
    sk = 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](#).

7.1.6 Adding a Resource Tag

Function

This API is used to add a tag to a resource. This API is a historical API. You are advised to use the APIs described in "Adding a Tag to a Cloud Connection" and "Adding a Tag to a Bandwidth Package".

Calling Method

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

URI

POST /v3/{domain_id}/ccaas/{resource_type}/{resource_id}/tags

Table 7-23 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 7-24 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token. Minimum: 0 Maximum: 102400

Table 7-25 Request body parameters

Parameter	Mandatory	Type	Description
tag	No	Tag object	Key-value pair.

Table 7-26 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

import os
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 = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["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](#).