Cloud Connect

API Reference

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1 Before You Start

Welcome to *Cloud Connect API Reference*. Cloud Connect allows you to quickly build fast, stable networks to connect VPCs across regions and connect VPCs to on-premises data centers. 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**.

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**.

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.

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 more constraints, see API description.

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

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user passwords and grant user permissions. The account is a payment entity, which should not be used directly to perform routine management. To ensure account security, 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**.

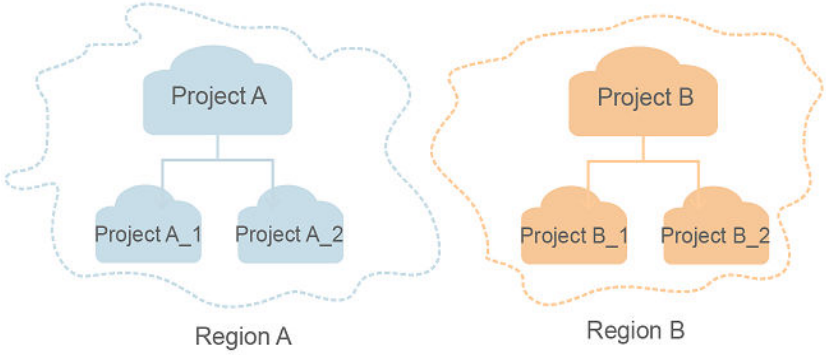
- AZ

  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

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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***.

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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

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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.

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

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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.
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
```

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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 *Hostname:Port number*. 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
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

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Parameter	Description	Mandatory	Example Value
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: MIIPAgYJKoZIhvcNAQcCo...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
```

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```
Authorization: SDK-HMAC-SHA256 Access=**********, SignedHeaders=content-type;host;x-sdk-date,
Signature=**********

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

If all data required for the API request is available, you can send the request to call the API through **curl**, **Postman**, or coding.

3.2 Authentication

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

- AK/SK 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.
- The AK/SK can either be permanent or temporary. If it is temporary, the **X-Security-Token** field must be included in the request header. The value is the security token of the temporary AK/SK.

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.

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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 a 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 that the IAM user belongs to
                    }
                }
            }
        },
        "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 **ABCDEFG....**, **X-Auth-Token: ABCDEFG....** 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: ABCDEFG....
```

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.

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Response Header

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

Figure 3-2 shows the response header for the API used to **create an IAM user**.

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_[redacted]_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 shows 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
    }
}
```

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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.

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4 API

4.1 Cloud Connection

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.

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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	**CloudConnectionInstance** object	Cloud connection.

Table 4-6 CloudConnectionInstance

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.

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Parameter	Type	Description
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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 connection application scenarios. • **VPC**: VPC
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	The tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	The 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

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```
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");
```

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```
        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.withName("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"
        )
```

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```
        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.

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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 returned on each page. The value ranges from 1 to 2000.

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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 strings	Resource ID. Multiple IDs can be queried.
name	No	Array of strings	The resource name used for query. Multiple names can be specified for query.
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	Network instance type for filtering 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.

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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 **CloudConnectionInstance** 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 CloudConnectionInstance

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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.

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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 connection application scenarios. • **VPC**: VPC
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	The tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	The 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",
```

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```
 "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) {
```

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```
            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).
```

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```
        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 about 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.

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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 Instance** object	Cloud connection.

Table 4-18 CloudConnectionInstance

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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.

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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 connection application scenarios. • **VPC**: VPC
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	The tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	The tag value. The value can contain a maximum of 255 Unicode characters, including letters, digits, hyphens (-), underscores (_), and periods (.).

Example Requests

Querying the details about a cloud connection

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

Example Responses

Status code: 200

The details about the cloud connection have been queried.

```
{
  "cloud_connection" : {
```

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```
    "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());
```

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```
            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()
```

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```
    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 about 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.

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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	**CloudConnectionInstance** object	Cloud connection.

Table 4-25 CloudConnectionInstance

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

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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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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 connection application scenarios. • **VPC**: VPC
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	The tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).

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Parameter	Type	Description
value	String	The 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;
```

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```
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 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"]
```

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```
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{
```

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```
        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.

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Request Parameters

Table 4-28 Request header parameters

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

Response Parameters

Status code: 204

Table 4-29 Response header parameters

Parameter	Type	Description
x-request-id	String	-

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");
```

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```
        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
```

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```
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.

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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 4-30 Path Parameters

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

Request Parameters

Table 4-31 Request header parameters

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

Table 4-32 Request body parameters

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

Table 4-33 Tag

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

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Response Parameters

Status code: 204

Table 4-34 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");
```

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```
        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(
```

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```
            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)
    }
}
```

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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 4-35 Path Parameters

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

Request Parameters

Table 4-36 Request header parameters

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

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Table 4-37 Request body parameters

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

Table 4-38 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	The tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	No	String	The 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 4-39 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

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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());
        }
    }
}
```

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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
```

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```
    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.

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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 4-40 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-41 Request header parameters

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

Response Parameters

Status code: 200

Table 4-42 Response body parameters

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

Table 4-43 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.

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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();
```

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```
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException 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")
```

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```
    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

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Table 4-44 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-45 Request header parameters

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

Table 4-46 Request body parameters

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

Table 4-47 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 4-48 Response body parameters

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

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

Table 4-49 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 4-50 CloudConnectionInstance

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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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.

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Parameter	Type	Description
used_scene	String	Cloud connection application scenarios. • **VPC**: VPC
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 4-51 Tag

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

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```
    "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();
```

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```
        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
        )
```

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```
        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.

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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 4-52 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-53 Request header parameters

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

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Table 4-54 Request body parameters

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

Table 4-55 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 loaded to a cloud connection. • **vpc**: VPC • **vgw**: virtual gateway
cidrs	Yes	Array of strings	CIDR block routes advertised by the network instance.

Response Parameters

Status code: 201

Table 4-56 Response body parameters

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

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Table 4-57 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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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. • **ACTIVE**: The processing is successful. • **PENDING**: The network instance is being processed. • **ERROR**: The processing failed.
type	String	Type of the network instance. • **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
```

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```
{
  "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" : "c8fe3d71352e273915bfbd74ce58368a",
  "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
```

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```
this example, set environment variables CLOUD_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.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()
```

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```
    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,
```

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```
        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 4-58 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

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Table 4-59 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.
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 strings	Resource ID. Multiple IDs can be queried.
name	No	Array of strings	The resource name used for query. Multiple names can be specified for query.
description	No	Array of strings	Description. Multiple descriptions can be queried.
cloud_connection_id	No	Array of strings	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.

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Request Parameters

Table 4-60 Request header parameters

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

Response Parameters

Status code: 200

Table 4-61 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 4-62 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 4-63 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.

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Parameter	Type	Description
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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. • **ACTIVE**: The processing is successful. • **PENDING**: The network instance is being processed. • **ERROR**: The processing failed.
type	String	Type of the network instance. • **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" : "b961d5fcda6b993b5b750f1b96e484e0",
  "network_instances" : [ {
    "id" : "XXX",
    "name" : "",
```

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```
    "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());
```

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```
            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(
```

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```
        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 about 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 4-64 Path Parameters

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

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Request Parameters

Table 4-65 Request header parameters

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

Response Parameters

Status code: 200

Table 4-66 Response body parameters

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

Table 4-67 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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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.

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Parameter	Type	Description
region_id	String	Region ID.
project_id	String	Project ID.
status	String	Status of the network instance. • **ACTIVE**: The processing is successful. • **PENDING**: The network instance is being processed. • **ERROR**: The processing failed.
type	String	Type of the network instance. • **vpc**: a VPC • **vgw**: a virtual gateway
cidrs	Array of strings	CIDR block routes advertised by the network instance.

Example Requests

Querying the details about a network instance

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

Example Responses

Status code: 200

The details about a network instance have been queried.

```
{
  "request_id" : "b961d5fcda6b993b5b750f1b96e484e0",
  "network_instance" : {
    "id" : "XXX",
    "name" : "",
    "description" : "",
    "domain_id" : "XXX",
    "created_at" : "2023-09-20T09:33:15Z",
    "updated_at" : "2023-09-20T09:33:16Z",
    "project_id" : "XXX",
    "instance_domain_id" : "",
    "cloud_connection_id" : "XXX",
    "region_id" : "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.

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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"]
```

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```
    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.

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Status Codes

Status Code	Description
200	The details about 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 4-68 Path Parameters

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

Request Parameters

Table 4-69 Request header parameters

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

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Table 4-70 Request body parameters

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

Table 4-71 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 4-72 Response body parameters

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

Table 4-73 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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.

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Parameter	Type	Description
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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. • **ACTIVE**: The processing is successful. • **PENDING**: The network instance is being processed. • **ERROR**: The processing failed.
type	String	Type of the network instance. • **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",
```

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```
  "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();
```

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```
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException 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"
```

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```
    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.

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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 4-74 Path Parameters

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

Request Parameters

Table 4-75 Request header parameters

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

Response Parameters

Status code: 204

Table 4-76 Response header parameters

Parameter	Type	Description
x-request-id	String	-

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.

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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.environ["CLOUD_SDK_AK"]
```

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```
    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 = 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.

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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 4-77 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-78 Request header parameters

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

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Table 4-79 Request body parameters

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

Table 4-80 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	Local geographic region. Cloud Connect is available in the following geographic regions: • **Chinese-Mainland**: Chinese mainland • **Asia-Pacific**: Asia Pacific • **Africa**: Africa • **Western-Latin-America**: Western Latin America • **Eastern-Latin-America**: Eastern Latin America • **Northern-Latin-America**: Northern Latin America

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Parameter	Mandatory	Type	Description
remote_area_id	Yes	String	Remote geographic region. Cloud Connect is available in the following geographic regions: • **Chinese-Mainland**: Chinese mainland • **Asia-Pacific**: Asia Pacific • **Africa**: 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 capacity.
billing_mode	Yes	Integer	Billing mode of the bandwidth package on the Chinese mainland website or the International website. • **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
bandwidth	Yes	Integer	bandwidth capacity specified for the bandwidth package.
resource_id	No	String	ID of the resource that the bandwidth package is bound to.

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Parameter	Mandatory	Type	Description
resource_type	No	String	Type of the resource that the bandwidth package is bound to. **cloud_connection**: The bandwidth package is bound to a cloud connection.

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Parameter	Mandatory	Type	Description
spec_code	No	String	Specification code of the bandwidth package. • **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

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Parameter	Mandatory	Type	Description
			• **bandwidth.cmtocm**: Chinese mainland on the International website • **bandwidth.cmtoela**: Chinese mainland-Eastern Latin America on both the Chinese Mainland website and International website • **bandwidth.cmtonla**: Chinese mainland-Northern Latin America on both the Chinese Mainland website and International website • **bandwidth.cmtowla**: Chinese mainland-Western Latin America on both the Chinese Mainland website and International website • **bandwidth.elatoela**: Eastern Latin America on both the Chinese Mainland website and International website • **bandwidth.elatonla**: Eastern Latin America–Northern Latin America on both the Chinese Mainland website and International website • **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

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Parameter	Mandatory	Type	Description
interflow_mode	No	String	Bandwidth package applicability. • **Area**: geographic regions • **Region**: cloud regions
prepaid_options	No	**CreatePrepaidOptions** object	Payment attributes.

Table 4-81 CreatePrepaidOptions

Parameter	Mandatory	Type	Description
period_type	Yes	String	Unit of a subscription period. Both monthly and yearly subscription periods are supported. • **month**: The unit of the subscription period is month. • **year**: The unit of the subscription period is year.
period_num	Yes	Integer	Number of subscription periods. The value varies depending on the operations policy. The value ranges from 1 to 9, if **period_type** is set to **month**. The value ranges from 1 to 3, if **period_type** is set to **year**.
is_auto_renew	No	Boolean	Whether to enable auto renewal. • **true**: Auto renewal is enabled. • **false**: Auto renewal is disabled.

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Parameter	Mandatory	Type	Description
is_auto_pay	No	Boolean	Whether the payment will be automatically deducted from your account balance when an order is submitted. • **true**: The order will be automatically paid. • **false**: The order will not be automatically paid. If you use automatic payment, the order is paid with your account balance. If you want to use cash coupons, do not use automatic payment and select the cash coupons for the payment in the Billing Center.

Response Parameters

Status code: 201

Table 4-82 Response body parameters

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

Table 4-83 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.

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Parameter	Type	Description
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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**: The bandwidth package is bound to a cloud connection.
local_area_id	String	Local geographic region. Cloud Connect is available in the following geographic regions: • **Chinese-Mainland**: Chinese mainland • **Asia-Pacific**: Asia Pacific • **Africa**: Africa • **Western-Latin-America**: Western Latin America • **Eastern-Latin-America**: Eastern Latin America • **Northern-Latin-America**: Northern Latin America
remote_area_id	String	Remote geographic region. Cloud Connect is available in the following geographic regions: • **Chinese-Mainland**: Chinese mainland • **Asia-Pacific**: Asia Pacific • **Africa**: Africa • **Western-Latin-America**: Western Latin America • **Eastern-Latin-America**: Eastern Latin America • **Northern-Latin-America**: Northern Latin America
spec_code	String	Specification code of the bandwidth package.

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Parameter	Type	Description
billing_mode	Integer	Billing mode of the bandwidth package on the Chinese mainland website or the International website. • **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 • **7**: daily 95th percentile bandwidth billing on the Chinese mainland website • **8**: daily 95th percentile bandwidth billing on the International website
tags	Array of **Tag** objects	Resource tags.
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 capacity.
bandwidth	Integer	Capacity specified for the bandwidth package.
interflow_mode	String	Bandwidth package applicability. • **Area**: geographic regions • **Region**: cloud regions

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Table 4-84 Tag

Parameter	Type	Description
key	String	The tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	The 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" : "",
```

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```
    "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) {
```

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```
            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.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 = 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.

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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 4-85 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-86 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.

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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 strings	Resource ID. Multiple IDs can be queried.
name	No	Array of strings	The resource name used for query. Multiple names can be specified for query.
enterprise_project_id	No	Array of strings	Enterprise project IDs.
cloud_connection_id	No	Array of strings	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 4-87 Request header parameters

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

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Response Parameters

Status code: 200

Table 4-88 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 4-89 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 4-90 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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.

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Parameter	Type	Description
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**: The bandwidth package is bound to a cloud connection.
local_area_id	String	Local geographic region. Cloud Connect is available in the following geographic regions: • **Chinese-Mainland**: Chinese mainland • **Asia-Pacific**: Asia Pacific • **Africa**: Africa • **Western-Latin-America**: Western Latin America • **Eastern-Latin-America**: Eastern Latin America • **Northern-Latin-America**: Northern Latin America
remote_area_id	String	Remote geographic region. Cloud Connect is available in the following geographic regions: • **Chinese-Mainland**: Chinese mainland • **Asia-Pacific**: Asia Pacific • **Africa**: Africa • **Western-Latin-America**: Western Latin America • **Eastern-Latin-America**: Eastern Latin America • **Northern-Latin-America**: Northern Latin America
spec_code	String	Specification code of the bandwidth package.

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Parameter	Type	Description
billing_mode	Integer	Billing mode of the bandwidth package on the Chinese mainland website or the International website. • **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 • **7**: daily 95th percentile bandwidth billing on the Chinese mainland website • **8**: daily 95th percentile bandwidth billing on the International website
tags	Array of **Tag** objects	Resource tags.
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 capacity.
bandwidth	Integer	Capacity specified for the bandwidth package.
interflow_mode	String	Bandwidth package applicability. • **Area**: geographic regions • **Region**: cloud regions

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Table 4-91 Tag

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

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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
```

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```
variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in 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.

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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 about 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 4-92 Path Parameters

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

Request Parameters

Table 4-93 Request header parameters

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

Response Parameters

Status code: 200

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Table 4-94 Response body parameters

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

Table 4-95 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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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**: The bandwidth package is bound to a cloud connection.

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Parameter	Type	Description
local_area_id	String	Local geographic region. Cloud Connect is available in the following geographic regions: • **Chinese-Mainland**: Chinese mainland • **Asia-Pacific**: Asia Pacific • **Africa**: Africa • **Western-Latin-America**: Western Latin America • **Eastern-Latin-America**: Eastern Latin America • **Northern-Latin-America**: Northern Latin America
remote_area_id	String	Remote geographic region. Cloud Connect is available in the following geographic regions: • **Chinese-Mainland**: Chinese mainland • **Asia-Pacific**: Asia Pacific • **Africa**: Africa • **Western-Latin-America**: Western Latin America • **Eastern-Latin-America**: Eastern Latin America • **Northern-Latin-America**: Northern Latin America
spec_code	String	Specification code of the bandwidth package.

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Parameter	Type	Description
billing_mode	Integer	Billing mode of the bandwidth package on the Chinese mainland website or the International website. • **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 • **7**: daily 95th percentile bandwidth billing on the Chinese mainland website • **8**: daily 95th percentile bandwidth billing on the International website
tags	Array of **Tag** objects	Resource tags.
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 capacity.
bandwidth	Integer	Capacity specified for the bandwidth package.
interflow_mode	String	Bandwidth package applicability. • **Area**: geographic regions • **Region**: cloud regions

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Table 4-96 Tag

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

Example Requests

Querying the details about a bandwidth package

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

Example Responses

Status code: 200

The details about 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.

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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"]
```

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```
    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.

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Status Codes

Status Code	Description
200	The details about 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 4-97 Path Parameters

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

Request Parameters

Table 4-98 Request header parameters

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

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Table 4-99 Request body parameters

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

Table 4-100 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. • **1**: yearly/monthly on the Chinese mainland website • **2**: yearly/monthly on the international website • **5**: 95th percentile bandwidth billing on the Chinese mainland website • **6**: 95th percentile bandwidth billing on the international website
prepaid_options	No	**UpdatePrepaidOptions** object	Payment attributes.

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Table 4-101 UpdatePrepaidOptions

Parameter	Mandatory	Type	Description
period_type	No	String	Unit of a subscription period. Both monthly and yearly subscription periods are supported. • **month**: The unit of the subscription period is month. • **year**: The unit of the subscription period is year.
period_num	No	Integer	Number of subscription periods. The value varies depending on the operations policy. The value ranges from 1 to 9, if **period_type** is set to **month**. The value ranges from 1 to 3, if **period_type** is set to **year**.
is_auto_renew	No	Boolean	Whether to enable auto renewal. • **true**: Auto renewal is enabled. • **false**: Auto renewal is disabled.
is_auto_pay	No	Boolean	Whether the payment will be automatically deducted from your account balance when an order is submitted. • **true**: The order will be automatically paid. • **false**: The order will not be automatically paid. If you use automatic payment, the order is paid with your account balance. If you want to use cash coupons, do not use automatic payment and select the cash coupons for the payment in the Billing Center.

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Response Parameters

Status code: 200

Table 4-102 Response body parameters

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

Table 4-103 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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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**: The bandwidth package is bound to a cloud connection.

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Parameter	Type	Description
local_area_id	String	Local geographic region. Cloud Connect is available in the following geographic regions: • **Chinese-Mainland**: Chinese mainland • **Asia-Pacific**: Asia Pacific • **Africa**: Africa • **Western-Latin-America**: Western Latin America • **Eastern-Latin-America**: Eastern Latin America • **Northern-Latin-America**: Northern Latin America
remote_area_id	String	Remote geographic region. Cloud Connect is available in the following geographic regions: • **Chinese-Mainland**: Chinese mainland • **Asia-Pacific**: Asia Pacific • **Africa**: Africa • **Western-Latin-America**: Western Latin America • **Eastern-Latin-America**: Eastern Latin America • **Northern-Latin-America**: Northern Latin America
spec_code	String	Specification code of the bandwidth package.

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Parameter	Type	Description
billing_mode	Integer	Billing mode of the bandwidth package on the Chinese mainland website or the International website. • **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 • **7**: daily 95th percentile bandwidth billing on the Chinese mainland website • **8**: daily 95th percentile bandwidth billing on the International website
tags	Array of **Tag** objects	Resource tags.
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 capacity.
bandwidth	Integer	Capacity specified for the bandwidth package.
interflow_mode	String	Bandwidth package applicability. • **Area**: geographic regions • **Region**: cloud regions

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Table 4-104 Tag

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

Example Requests

Changing the bandwidth capacity 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"
  }
}
```

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SDK Sample Code

The SDK sample code is as follows.

Java

Changing the bandwidth capacity 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 capacity of a bandwidth package

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```
# 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 = 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 capacity 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()
```

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```
    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}

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Table 4-105 Path Parameters

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

Request Parameters

Table 4-106 Request header parameters

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

Response Parameters

Status code: 204

The bandwidth package has been deleted.

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) {
```

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

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```
        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**.

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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 4-107 Path Parameters

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

Request Parameters

Table 4-108 Request header parameters

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

Table 4-109 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of **Tag** objects	Included tags.

Table 4-110 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	The tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).

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Parameter	Mandatory	Type	Description
value	No	String	The 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 4-111 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.*;
```

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```
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{
        {
```

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```
            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 4-112 Path Parameters

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

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Request Parameters

Table 4-113 Request header parameters

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

Table 4-114 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of **Tag** objects	Included tags.

Table 4-115 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	The tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	No	String	The 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 4-116 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
```

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```
{
  "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());
```

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```
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException 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
```

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```
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**.

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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 4-117 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.

Response Parameters

Status code: 200

Table 4-119 Response body parameters

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

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Table 4-120 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");
```

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```
        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 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 = 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 (
```

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```
    "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

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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 4-121 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-122 Request header parameters

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

Table 4-123 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of **MultivaluedTag** objects	Included tags.

Table 4-124 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

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Table 4-125 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 4-126 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 4-127 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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.
resource_id	String	ID of the resource that the bandwidth package is bound to.

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Parameter	Type	Description
resource_type	String	Type of the resource that the bandwidth package is bound to. **cloud_connection**: The bandwidth package is bound to a cloud connection.
local_area_id	String	Local geographic region. Cloud Connect is available in the following geographic regions: • **Chinese-Mainland**: Chinese mainland • **Asia-Pacific**: Asia Pacific • **Africa**: Africa • **Western-Latin-America**: Western Latin America • **Eastern-Latin-America**: Eastern Latin America • **Northern-Latin-America**: Northern Latin America
remote_area_id	String	Remote geographic region. Cloud Connect is available in the following geographic regions: • **Chinese-Mainland**: Chinese mainland • **Asia-Pacific**: Asia Pacific • **Africa**: Africa • **Western-Latin-America**: Western Latin America • **Eastern-Latin-America**: Eastern Latin America • **Northern-Latin-America**: Northern Latin America
spec_code	String	Specification code of the bandwidth package.

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Parameter	Type	Description
billing_mode	Integer	Billing mode of the bandwidth package on the Chinese mainland website or the International website. • **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 • **7**: daily 95th percentile bandwidth billing on the Chinese mainland website • **8**: daily 95th percentile bandwidth billing on the International website
tags	Array of **Tag** objects	Resource tags.
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 capacity.
bandwidth	Integer	Capacity specified for the bandwidth package.
interflow_mode	String	Bandwidth package applicability. • **Area**: geographic regions • **Region**: cloud regions

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Table 4-128 Tag

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

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```
    } ],
    "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) {
```

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```
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException 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.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 = 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
```

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```
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.

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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 4-129 Path Parameters

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

Request Parameters

Table 4-130 Request header parameters

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

Table 4-131 Request body parameters

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

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Table 4-132 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**: The bandwidth package is bound to a cloud connection.

Response Parameters

Status code: 201

Table 4-133 Response body parameters

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

Table 4-134 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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.

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Parameter	Type	Description
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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**: The bandwidth package is bound to a cloud connection.
local_area_id	String	Local geographic region. Cloud Connect is available in the following geographic regions: • **Chinese-Mainland**: Chinese mainland • **Asia-Pacific**: Asia Pacific • **Africa**: Africa • **Western-Latin-America**: Western Latin America • **Eastern-Latin-America**: Eastern Latin America • **Northern-Latin-America**: Northern Latin America
remote_area_id	String	Remote geographic region. Cloud Connect is available in the following geographic regions: • **Chinese-Mainland**: Chinese mainland • **Asia-Pacific**: Asia Pacific • **Africa**: Africa • **Western-Latin-America**: Western Latin America • **Eastern-Latin-America**: Eastern Latin America • **Northern-Latin-America**: Northern Latin America
spec_code	String	Specification code of the bandwidth package.

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Parameter	Type	Description
billing_mode	Integer	Billing mode of the bandwidth package on the Chinese mainland website or the International website. • **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 • **7**: daily 95th percentile bandwidth billing on the Chinese mainland website • **8**: daily 95th percentile bandwidth billing on the International website
tags	Array of **Tag** objects	Resource tags.
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 capacity.
bandwidth	Integer	Capacity specified for the bandwidth package.
interflow_mode	String	Bandwidth package applicability. • **Area**: geographic regions • **Region**: cloud regions

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Table 4-135 Tag

Parameter	Type	Description
key	String	The tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	The 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"
}
```

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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());
        }
    }
}
```

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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")
```

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```
    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.

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URI

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

Table 4-136 Path Parameters

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

Request Parameters

Table 4-137 Request header parameters

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

Table 4-138 Request body parameters

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

Table 4-139 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**: The bandwidth package is bound to a cloud connection.

Response Parameters

Status code: 201

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Table 4-140 Response body parameters

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

Table 4-141 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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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**: The bandwidth package is bound to a cloud connection.

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Parameter	Type	Description
local_area_id	String	Local geographic region. Cloud Connect is available in the following geographic regions: • **Chinese-Mainland**: Chinese mainland • **Asia-Pacific**: Asia Pacific • **Africa**: Africa • **Western-Latin-America**: Western Latin America • **Eastern-Latin-America**: Eastern Latin America • **Northern-Latin-America**: Northern Latin America
remote_area_id	String	Remote geographic region. Cloud Connect is available in the following geographic regions: • **Chinese-Mainland**: Chinese mainland • **Asia-Pacific**: Asia Pacific • **Africa**: Africa • **Western-Latin-America**: Western Latin America • **Eastern-Latin-America**: Eastern Latin America • **Northern-Latin-America**: Northern Latin America
spec_code	String	Specification code of the bandwidth package.

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Parameter	Type	Description
billing_mode	Integer	Billing mode of the bandwidth package on the Chinese mainland website or the International website. • **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 • **7**: daily 95th percentile bandwidth billing on the Chinese mainland website • **8**: daily 95th percentile bandwidth billing on the International website
tags	Array of **Tag** objects	Resource tags.
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 capacity.
bandwidth	Integer	Capacity specified for the bandwidth package.
interflow_mode	String	Bandwidth package applicability. • **Area**: geographic regions • **Region**: cloud regions

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Table 4-142 Tag

Parameter	Type	Description
key	String	The tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	String	The 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"
}
```

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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());
        }
    }
}
```

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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")
```

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```
    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.

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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 4-143 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-144 Request header parameters

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

Table 4-145 Request body parameters

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

Table 4-146 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.

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Response Parameters

Status code: 201

Table 4-147 Response body parameters

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

Table 4-148 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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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	Bandwidth capacity, in Mbit/s.

Table 4-149 InterRegion

Parameter	Type	Description
id	String	Instance ID.

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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

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.

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Java

Assigning an inter-region bandwidth with both region IDs specified

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

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

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

public class CreateInterRegionBandwidthSolution {

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

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

        CcClient client = CcClient.newBuilder()
                .withCredential(auth)
                .withRegion(CcRegion.valueOf("<YOUR REGION>"))
                .build();
        CreateInterRegionBandwidthRequest request = new CreateInterRegionBandwidthRequest();
        CreateInterRegionBandwidthRequestBody body = new CreateInterRegionBandwidthRequestBody();
        List<String> listInterRegionBandwidthInterRegionIds = new ArrayList<>();
        listInterRegionBandwidthInterRegionIds.add("region_a");
        listInterRegionBandwidthInterRegionIds.add("region_b");
        CreateInterRegionBandwidth interRegionBandwidthbody = new CreateInterRegionBandwidth();
        interRegionBandwidthbody.withBandwidth(5)
            .withBandwidthPackageId("XXX")
            .withInterRegionIds(listInterRegionBandwidthInterRegionIds)
            .withCloudConnectionId("XXX");
        body.withInterRegionBandwidth(interRegionBandwidthbody);
        request.withBody(body);
        try {
            CreateInterRegionBandwidthResponse response = client.createInterRegionBandwidth(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

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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
```

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```
variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment 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.

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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 4-150 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-151 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.
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 strings	Resource ID. Multiple IDs can be queried.
enterprise_project_id	No	Array of strings	Enterprise project IDs.

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Parameter	Mandatory	Type	Description
cloud_connection_id	No	Array of strings	Cloud connection IDs.
bandwidth_package_id	No	Array of strings	Bandwidth package list used to query inter-region bandwidths.

Request Parameters

Table 4-152 Request header parameters

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

Response Parameters

Status code: 200

Table 4-153 Response body parameters

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

Table 4-154 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.

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Table 4-155 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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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	Bandwidth capacity, in Mbit/s.

Table 4-156 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
```

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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)
```

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```
            .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"
```

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```
    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 about 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.

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URI

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

Table 4-157 Path Parameters

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

Request Parameters

Table 4-158 Request header parameters

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

Response Parameters

Status code: 200

Table 4-159 Response body parameters

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

Table 4-160 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.

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Parameter	Type	Description
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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	Bandwidth capacity, in Mbit/s.

Table 4-161 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 details about an inter-region bandwidth

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

Example Responses

Status code: 200

The details about the inter-region bandwidth have been queried.

```
{
  "request_id" : "fd403735e22a5213845afbf69425a976",
  "inter_region_bandwidth" : {
    "id" : "XXX",
    "name" : "",
    "description" : "",
    "domain_id" : "XXX",
```

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```
    "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());
```

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```
            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 = 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()
```

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```
    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 about the inter-region bandwidth have been queried.

Error Codes

See **Error Codes**.

4.4.4 Changing the Capacity of an Inter-Region Bandwidth

Function

This API is used to change the capacity 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

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

Table 4-162 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

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Parameter	Mandatory	Type	Description
id	Yes	String	Instance ID.

Request Parameters

Table 4-163 Request header parameters

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

Table 4-164 Request body parameters

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

Table 4-165 UpdateInterRegionBandwidth

Parameter	Mandatory	Type	Description
bandwidth	Yes	Integer	Inter-region bandwidth.

Response Parameters

Status code: 200

Table 4-166 Response body parameters

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

Table 4-167 InterRegionBandwidth

Parameter	Type	Description
id	String	Instance ID.

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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.
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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	Bandwidth capacity, in Mbit/s.

Table 4-168 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

Changing the capacity of an inter-region bandwidth

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

{
  "inter_region_bandwidth" : {
    "bandwidth" : "10"
  }
}
```

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Example Responses

Status code: 200

The inter-region bandwidth capacity has been changed.

```
{
  "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

Changing the capacity of 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);
```

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```
        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

Changing the capacity of 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)
```

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

Go

Changing the capacity of 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.

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Status Codes

Status Code	Description
200	The inter-region bandwidth capacity has been changed.

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 4-169 Path Parameters

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

Request Parameters

Table 4-170 Request header parameters

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

Response Parameters

Status code: 204

The inter-region bandwidth has been deleted.

None

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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());
        }
    }
}
```

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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())
```

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```
    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 Authorizations

4.5.1 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 4-171 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

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Request Parameters

Table 4-172 Request header parameters

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

Table 4-173 Request body parameters

Parameter	Mandatory	Type	Description
authorisation	Yes	**CreateAuthorisation** object	Details of the authorization to be created.

Table 4-174 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 4-175 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.

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Parameter	Type	Description
authorisation	**Authorisation** object	Authorization.

Table 4-176 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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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	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
```

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```
{
  "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");
```

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```
        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(
```

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```
            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)
```

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```
  }
}
```

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**.

4.5.2 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 4-177 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

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Table 4-178 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.
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 strings	Resource ID. Multiple IDs can be queried.
name	No	Array of strings	The resource name used for query. Multiple names can be specified for query.
description	No	Array of strings	Description. Multiple descriptions can be queried.
cloud_connection_id	No	Array of strings	Cloud connection IDs.
instance_id	No	Array of strings	Network instance ID used to query authorizations.

Request Parameters

Table 4-179 Request header parameters

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

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Response Parameters

Status code: 200

Table 4-180 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 4-181 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 4-182 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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.

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Parameter	Type	Description
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	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.

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

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```
    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.

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Status Codes

Status Code	Description
200	The authorization list has been queried.

Error Codes

See **Error Codes**.

4.5.3 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 4-183 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 returned on each page. The value ranges from 1 to 2000.

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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 strings	Resource ID. Multiple IDs can be queried.
name	No	Array of strings	The resource name used for query. Multiple names can be specified for query.
description	No	Array of strings	Description. Multiple descriptions can be queried.
cloud_connection_id	No	Array of strings	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.
permissions	Array of **Permission** 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 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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
domain_id	String	ID of the account that the instance belongs to.
cloud_connection_id	String	Cloud connection ID.
status	String	Authorization status.

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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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;
```

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```
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.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 = ListPermissionsRequest()
        response = client.list_permissions(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
```

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```
        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**.

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4.5.4 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 4-189 Path Parameters

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

Request Parameters

Table 4-190 Request header parameters

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

Table 4-191 Request body parameters

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

Table 4-192 UpdateAuthorisation

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

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Response Parameters

Status code: 200

Table 4-193 Response body parameters

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

Table 4-194 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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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	Whether an authorized VPC has been loaded to a cloud connection.

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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.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 = 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)
    }
}
```

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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**.

4.5.5 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 4-195 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.

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Response Parameters

Status code: 204

The authorization has been canceled.

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) {
```

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```
            e.printStackTrace();
        } catch (ServiceResponseException 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")
```

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```
    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**.

4.6 Central Networks

4.6.1 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

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Table 4-197 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-198 Request header parameters

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

Table 4-199 Request body parameters

Parameter	Mandatory	Type	Description
central_network	Yes	**CreateCentralNetwork** object	Central network.

Table 4-200 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.

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Table 4-201 Tag

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

Table 4-202 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 **AssociateErInstanceDocument** objects	List of the enterprise routers on a central network.

Table 4-203 CentralNetworkPlaneDocument

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

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Table 4-204 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 4-205 ExcludeErConnectionDocument

Parameter	Mandatory	Type	Description
[items]	No	Array of **AssociateErInstanceDocument** objects	Connections between enterprise routers managed by the central network plane.

Table 4-206 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 4-207 Response body parameters

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

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Table 4-208 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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.
domain_id	String	ID of the account that the instance belongs to.
state	String	Central network status. • **AVAILABLE** • **UPDATING** • **FAILED** • **CREATING** • **DELETING** • **DELETED** • **RESTORING**
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 **CentralNetworkErInstance** objects	List of enterprise routers on a central network.
connections	Array of **CentralNetworkConnectionInfo** objects	List of the enterprise router attachments on a central network.

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Table 4-209 Tag

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

Table 4-210 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 a central network.
exclude_er_connections	Array of **ExcludeErConnectionDocument** objects	Whether to exclude the connections to enterprise routers on the central network.

Table 4-211 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.

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Table 4-212 ExcludeErConnectionDocument

Parameter	Type	Description
[items]	Array of **AssociateErInstanceDocument** objects	Connections between enterprise routers managed by the central network plane.

Table 4-213 AssociateErInstanceDocument

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

Table 4-214 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 4-215 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	Bandwidth capacity, in Mbit/s.

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Parameter	Type	Description
connection_type	String	Type of a central network connection. • **ER-ER**: peering connection between enterprise routers • **ER-GDGW**: connection between an enterprise router and a global DC gateway • **ER-ER_ROUTE_TABLE**: connection between an enterprise router and an enterprise router route table
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. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **DELETED** • **APPROVING** • **APPROVED** • **UNAPPROVED**

Table 4-216 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.

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Parameter	Type	Description
type	String	Type of the resource that can be added to a central network as an attachment. • **ER**: enterprise router • **GDGW**: global DC gateway • **ER_ROUTE_TABLE**: 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.*;
```

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```
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.withName("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 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>")) \
```

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```
        .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)
    }
}
```

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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**.

4.6.2 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 4-217 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-218 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.

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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 strings	Resource ID. Multiple IDs can be queried.
name	No	Array of strings	The resource name used for query. Multiple names can be specified for query.
state	No	Array of strings	Resource status. Multiple statuses can be used for query. • **AVAILABLE** • **UPDATING** • **FAILED** • **CREATING** • **DELETING** • **DELETED** • **RESTORING**
enterprise_project_id	No	Array of strings	Enterprise project IDs.
enterprise_router_id	No	Array of strings	Enterprise router IDs.
attachment_instance_id	No	Array of strings	Attachment ID.

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Parameter	Mandatory	Type	Description
global_connection_bandwidth_id	No	Array of strings	Bandwidth package IDs.
connection_id	No	Array of strings	Connection ID.

Request Parameters

Table 4-219 Request header parameters

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

Response Parameters

Status code: 200

Table 4-220 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 4-221 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.

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Table 4-222 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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.
domain_id	String	ID of the account that the instance belongs to.
state	String	Central network status. • **AVAILABLE** • **UPDATING** • **FAILED** • **CREATING** • **DELETING** • **DELETED** • **RESTORING**
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 **CentralNetworkErInstance** objects	List of enterprise routers on a central network.
connections	Array of **CentralNetworkConnectionInfo** objects	List of the enterprise router attachments on a central network.

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Table 4-223 Tag

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

Table 4-224 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 a central network.
exclude_er_connections	Array of **ExcludeErConnectionDocument** objects	Whether to exclude the connections to enterprise routers on the central network.

Table 4-225 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.

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Table 4-226 ExcludeErConnectionDocument

Parameter	Type	Description
[items]	Array of **AssociateErInstanceDocument** objects	Connections between enterprise routers managed by the central network plane.

Table 4-227 AssociateErInstanceDocument

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

Table 4-228 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 4-229 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	Bandwidth capacity, in Mbit/s.

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Parameter	Type	Description
connection_type	String	Type of a central network connection. • **ER-ER**: peering connection between enterprise routers • **ER-GDGW**: connection between an enterprise router and a global DC gateway • **ER-ER_ROUTE_TABLE**: connection between an enterprise router and an enterprise router route table
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. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **DELETED** • **APPROVING** • **APPROVED** • **UNAPPROVED**

Table 4-230 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.

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Parameter	Type	Description
type	String	Type of the resource that can be added to a central network as an attachment. • **ER**: enterprise router • **GDGW**: global DC gateway • **ER_ROUTE_TABLE**: 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
```

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```
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_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.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 = 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)
```

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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**.

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4.6.3 Querying a Central Network

Function

This API is used to query the details about 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 4-231 Path Parameters

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

Request Parameters

Table 4-232 Request header parameters

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

Response Parameters

Status code: 200

Table 4-233 Response body parameters

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

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Table 4-234 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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.
domain_id	String	ID of the account that the instance belongs to.
state	String	Central network status. • **AVAILABLE** • **UPDATING** • **FAILED** • **CREATING** • **DELETING** • **DELETED** • **RESTORING**
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 **CentralNetworkErInstance** objects	List of enterprise routers on a central network.
connections	Array of **CentralNetworkConnectionInfo** objects	List of the enterprise router attachments on a central network.

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Table 4-235 Tag

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

Table 4-236 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 a central network.
exclude_er_connections	Array of **ExcludeErConnectionDocument** objects	Whether to exclude the connections to enterprise routers on the central network.

Table 4-237 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.

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Table 4-238 ExcludeErConnectionDocument

Parameter	Type	Description
[items]	Array of **AssociateErInstanceDocument** objects	Connections between enterprise routers managed by the central network plane.

Table 4-239 AssociateErInstanceDocument

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

Table 4-240 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 4-241 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	Bandwidth capacity, in Mbit/s.

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Parameter	Type	Description
connection_type	String	Type of a central network connection. • **ER-ER**: peering connection between enterprise routers • **ER-GDGW**: connection between an enterprise router and a global DC gateway • **ER-ER_ROUTE_TABLE**: connection between an enterprise router and an enterprise router route table
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. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **DELETED** • **APPROVING** • **APPROVED** • **UNAPPROVED**

Table 4-242 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.

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Parameter	Type	Description
type	String	Type of the resource that can be added to a central network as an attachment. • **ER**: enterprise router • **GDGW**: global DC gateway • **ER_ROUTE_TABLE**: enterprise router route table

Example Requests

Querying the details about a central network

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

Example Responses

Status code: 200

The details about 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
```

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```
this example, set environment variables CLOUD_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.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 = 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)
```

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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 about a central network have been queried.

Error Codes

See **Error Codes**.

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4.6.4 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 4-243 Path Parameters

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

Request Parameters

Table 4-244 Request header parameters

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

Table 4-245 Request body parameters

Parameter	Mandatory	Type	Description
central_network	Yes	**UpdateCentralNetwork** object	Details of the central network to be updated.

Table 4-246 UpdateCentralNetwork

Parameter	Mandatory	Type	Description
name	No	String	Instance name.

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

Table 4-247 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	The tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	No	String	The 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 4-248 Response body parameters

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

Table 4-249 CentralNetwork

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

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Parameter	Type	Description
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.
domain_id	String	ID of the account that the instance belongs to.
state	String	Central network status. • **AVAILABLE** • **UPDATING** • **FAILED** • **CREATING** • **DELETING** • **DELETED** • **RESTORING**
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 **CentralNetworkErInstance** objects	List of enterprise routers on a central network.
connections	Array of **CentralNetworkConnectionInfo** objects	List of the enterprise router attachments on a central network.

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Table 4-250 Tag

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

Table 4-251 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 a central network.
exclude_er_connections	Array of **ExcludeErConnectionDocument** objects	Whether to exclude the connections to enterprise routers on the central network.

Table 4-252 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.

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Table 4-253 ExcludeErConnectionDocument

Parameter	Type	Description
[items]	Array of **AssociateErInstanceDocument** objects	Connections between enterprise routers managed by the central network plane.

Table 4-254 AssociateErInstanceDocument

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

Table 4-255 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 4-256 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	Bandwidth capacity, in Mbit/s.

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Parameter	Type	Description
connection_type	String	Type of a central network connection. • **ER-ER**: peering connection between enterprise routers • **ER-GDGW**: connection between an enterprise router and a global DC gateway • **ER-ER_ROUTE_TABLE**: connection between an enterprise router and an enterprise router route table
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. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **DELETED** • **APPROVING** • **APPROVED** • **UNAPPROVED**

Table 4-257 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.

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Parameter	Type	Description
type	String	Type of the resource that can be added to a central network as an attachment. • **ER**: enterprise router • **GDGW**: global DC gateway • **ER_ROUTE_TABLE**: 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.*;
```

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```
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 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 = 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)
```

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```
  }
}
```

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**.

4.6.5 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 4-258 Path Parameters

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

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Request Parameters

Table 4-259 Request header parameters

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

Response Parameters

Status code: 202

Table 4-260 Response body parameters

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

Table 4-261 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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.
domain_id	String	ID of the account that the instance belongs to.

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Parameter	Type	Description
state	String	Central network status. • **AVAILABLE** • **UPDATING** • **FAILED** • **CREATING** • **DELETING** • **DELETED** • **RESTORING**
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 **CentralNetworkErInstance** objects	List of enterprise routers on a central network.
connections	Array of **CentralNetworkConnectionInfo** objects	List of the enterprise router attachments on a central network.

Table 4-262 Tag

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

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Table 4-263 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 a central network.
exclude_er_connections	Array of **ExcludeErConnectionDocument** objects	Whether to exclude the connections to enterprise routers on the central network.

Table 4-264 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 4-265 ExcludeErConnectionDocument

Parameter	Type	Description
[items]	Array of **AssociateErInstanceDocument** objects	Connections between enterprise routers managed by the central network plane.

Table 4-266 AssociateErInstanceDocument

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

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Table 4-267 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 4-268 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	Bandwidth capacity, in Mbit/s.
connection_type	String	Type of a central network connection. • **ER-ER**: peering connection between enterprise routers • **ER-GDGW**: connection between an enterprise router and a global DC gateway • **ER-ER_ROUTE_TABLE**: connection between an enterprise router and an enterprise router route table
connection_point_pair	Array of **ConnectionPoint** objects	Both ends of a central network connection. The length is fixed to an array of 2.

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Parameter	Type	Description
state	String	Central network connection status. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **DELETED** • **APPROVING** • **APPROVED** • **UNAPPROVED**

Table 4-269 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 the resource that can be added to a central network as an attachment. • **ER**: enterprise router • **GDGW**: global DC gateway • **ER_ROUTE_TABLE**: enterprise router route table

Example Requests

Deleting a central network

```
DELETE /v3/{domain_id}/gcn/central-networks/{central_network_id}
```

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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
```

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```
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)
```

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```
  }
}
```

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**.

4.6.6 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 4-270 Path Parameters

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

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Request Parameters

Table 4-271 Request header parameters

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

Table 4-272 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of **Tag** objects	Included tags.

Table 4-273 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	The tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	No	String	The 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 4-274 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
```

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```
{
  "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());
```

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```
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException 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
```

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```
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**.

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4.6.7 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 4-275 Path Parameters

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

Request Parameters

Table 4-276 Request header parameters

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

Table 4-277 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of **Tag** objects	Included tags.

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Table 4-278 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	The tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	No	String	The 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 4-279 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;
```

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```
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
```

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```
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**.

4.6.8 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

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Table 4-280 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-281 Request header parameters

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

Response Parameters

Status code: 200

Table 4-282 Response body parameters

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

Table 4-283 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

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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());
        }
    }
}
```

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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{}
```

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```
    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**.

4.6.9 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 4-284 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

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Table 4-285 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.
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 4-286 Request header parameters

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

Table 4-287 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of **MultivaluedTag** objects	Included tags.

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Table 4-288 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 4-289 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 4-290 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 4-291 CentralNetwork

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

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Parameter	Type	Description
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.
domain_id	String	ID of the account that the instance belongs to.
state	String	Central network status. • **AVAILABLE** • **UPDATING** • **FAILED** • **CREATING** • **DELETING** • **DELETED** • **RESTORING**
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 **CentralNetworkErInstance** objects	List of enterprise routers on a central network.
connections	Array of **CentralNetworkConnectionInfo** objects	List of the enterprise router attachments on a central network.

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Table 4-292 Tag

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

Table 4-293 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 a central network.
exclude_er_connections	Array of **ExcludeErConnectionDocument** objects	Whether to exclude the connections to enterprise routers on the central network.

Table 4-294 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.

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Table 4-295 ExcludeErConnectionDocument

Parameter	Type	Description
[items]	Array of **AssociateErInstanceDocument** objects	Connections between enterprise routers managed by the central network plane.

Table 4-296 AssociateErInstanceDocument

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

Table 4-297 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 4-298 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	Bandwidth capacity, in Mbit/s.

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Parameter	Type	Description
connection_type	String	Type of a central network connection. • **ER-ER**: peering connection between enterprise routers • **ER-GDGW**: connection between an enterprise router and a global DC gateway • **ER-ER_ROUTE_TABLE**: connection between an enterprise router and an enterprise router route table
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. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **DELETED** • **APPROVING** • **APPROVED** • **UNAPPROVED**

Table 4-299 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.

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Parameter	Type	Description
type	String	Type of the resource that can be added to a central network as an attachment. • **ER**: enterprise router • **GDGW**: global DC gateway • **ER_ROUTE_TABLE**: 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;
```

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```
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())
```

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```
    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 Central Network Attachments

4.7.1 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.

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URI

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

Table 4-300 Path Parameters

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

Request Parameters

Table 4-301 Request header parameters

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

Table 4-302 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 4-303 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.

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Parameter	Mandatory	Type	Description
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 4-304 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 4-305 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.

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Parameter	Type	Description
state	String	Central network connection status. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **DELETED** • **APPROVING** • **APPROVED** • **UNAPPROVED**
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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: • **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	Bandwidth capacity, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.

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Parameter	Type	Description
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",
```

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```
 "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",
```

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```
            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{
```

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```
        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**.

4.7.2 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 4-306 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

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Parameter	Mandatory	Type	Description
central_network_id	Yes	String	Central network ID.

Table 4-307 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.
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 strings	Resource ID. Multiple IDs can be queried.
name	No	Array of strings	The resource name used for query. Multiple names can be specified for query.

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Parameter	Mandatory	Type	Description
state	No	Array of strings	Resource status. Multiple statuses can be used for query. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **DELETED** • **APPROVING** • **APPROVED** • **UNAPPROVED**
global_dc_gateway_id	No	Array of strings	Global DC gateway IDs.

Request Parameters

Table 4-308 Request header parameters

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

Response Parameters

Status code: 200

Table 4-309 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.

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Table 4-310 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 4-311 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	Central network connection status. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **DELETED** • **APPROVING** • **APPROVED** • **UNAPPROVED**
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.
central_network_id	String	Central network ID.

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Parameter	Type	Description
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: • **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	Bandwidth capacity, 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.

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Example Requests

Querying the list of global DC gateways on a central network

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

Example Responses

Status code: 200

The list of global DC gateways on the central network has been queried.

```
{
  "request_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
  "page_info" : {
    "next_marker" : "8EDF12u71N...",
    "previous_marker" : "8EDF12u71N...",
    "current_count" : 1
  },
  "central_network_gdgw_attachments" : [ {
    "id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "name" : "name",
    "description" : "description",
    "domain_id" : "XXX",
    "state" : "AVAILABLE",
    "created_at" : "2023-10-09T10:11:11.222Z",
    "updated_at" : "2023-10-09T10:11:11.222Z",
    "central_network_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "central_network_plane_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "global_connection_bandwidth_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "bandwidth_type" : "BandwidthPackage",
    "bandwidth_size" : 20,
    "is_frozen" : false,
    "enterprise_router_id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "enterprise_router_project_id" : "XXX",
    "enterprise_router_region_id" : "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 {
```

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

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```
    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.

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Error Codes

See **Error Codes**.

4.7.3 Querying a Global DC Gateway on a Central Network

Function

This API is used to query the details about 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 4-312 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 4-313 Request header parameters

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

Response Parameters

Status code: 200

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Table 4-314 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 4-315 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	Central network connection status. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **DELETED** • **APPROVING** • **APPROVED** • **UNAPPROVED**
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.
central_network_id	String	Central network ID.

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Parameter	Type	Description
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: • **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	Bandwidth capacity, 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.

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Example Requests

Querying the details about 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 about 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
```

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```
this example, set environment variables CLOUD_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.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 = 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)
```

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```
        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 about the global DC gateway on a central network have been queried.

Error Codes

See **Error Codes**.

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4.7.4 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 4-316 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 4-317 Request header parameters

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

Table 4-318 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.

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Table 4-319 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 4-320 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 4-321 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.

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Parameter	Type	Description
state	String	Central network connection status. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **DELETED** • **APPROVING** • **APPROVED** • **UNAPPROVED**
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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: • **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	Bandwidth capacity, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.

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Parameter	Type	Description
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",
```

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```
    "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
```

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```
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.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 = 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)
```

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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.

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Error Codes

See **Error Codes**.

4.7.5 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 4-322 Path Parameters

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

Request Parameters

Table 4-323 Request header parameters

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

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Table 4-324 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 4-325 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_er_table_project_id	Yes	String	Project ID of an enterprise router added to a central network.
attached_er_table_region_id	Yes	String	Region ID of an enterprise router.
attached_er_id	Yes	String	ID of an enterprise router added to a central network.
attached_er_table_id	Yes	String	Route table ID of an enterprise router added to a central network.
hosted_cloud	Yes	String	• **HWCloud**: Huawei Cloud • **Ireland**: Ireland site

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Response Parameters

Status code: 202

Table 4-326 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 4-327 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	Central network connection status. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **DELETED** • **APPROVING** • **APPROVED** • **UNAPPROVED**
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.

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Parameter	Type	Description
central_network_id	String	Central network ID.
central_network_plane_id	String	ID of the central network plane.
global_connection_bandwidth_id	String	Global connection bandwidth ID.
is_frozen	Boolean	Whether the resource is frozen.
bandwidth_type	String	Bandwidth type. The bandwidth types are as follows: • **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	Bandwidth capacity, 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.

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Parameter	Type	Description
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.
hosted_cloud	String	• **HWCloud**: Huawei Cloud • **Ireland**: Ireland site
approved_state	String	Approval status. • **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",
```

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```
    "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>"))
```

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```
            .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>")) \
```

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```
        .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{
```

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```
        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**.

4.7.6 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.

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URI

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

Table 4-328 Path Parameters

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

Table 4-329 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.
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 strings	Resource ID. Multiple IDs can be queried.

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Parameter	Mandatory	Type	Description
name	No	Array of strings	The resource name used for query. Multiple names can be specified for query.
state	No	Array of strings	Resource status. Multiple statuses can be used for query. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **DELETED** • **APPROVING** • **APPROVED** • **UNAPPROVED**
attachment_instance_id	No	Array of strings	Attachment ID.

Request Parameters

Table 4-330 Request header parameters

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

Response Parameters

Status code: 200

Table 4-331 Response body parameters

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

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Parameter	Type	Description
central_network_er_route_table_attachments	Array of **CentralNetworkErRouteTableAttachment** objects	Response body for adding an enterprise router route table as an attachment.

Table 4-332 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 4-333 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	Central network connection status. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **DELETED** • **APPROVING** • **APPROVED** • **UNAPPROVED**

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Parameter	Type	Description
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.
central_network_id	String	Central network ID.
central_network_plane_id	String	ID of the central network plane.
global_connection_bandwidth_id	String	Global connection bandwidth ID.
is_frozen	Boolean	Whether the resource is frozen.
bandwidth_type	String	Bandwidth type. The bandwidth types are as follows: • **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	Bandwidth capacity, 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.

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Parameter	Type	Description
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.
hosted_cloud	String	• **HWCloud**: Huawei Cloud • **Ireland**: Ireland site
approved_state	String	Approval status. • **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,
```


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```
    "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();
```

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```
            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 = 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).
```

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```
        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**.

4.7.7 Querying an Enterprise Router Route Table on a Central Network

Function

This API is used to query the details about 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}

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Table 4-334 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 4-335 Request header parameters

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

Response Parameters

Status code: 200

Table 4-336 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 4-337 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.

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Parameter	Type	Description
state	String	Central network connection status. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **DELETED** • **APPROVING** • **APPROVED** • **UNAPPROVED**
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.
central_network_id	String	Central network ID.
central_network_plane_id	String	ID of the central network plane.
global_connection_bandwidth_id	String	Global connection bandwidth ID.
is_frozen	Boolean	Whether the resource is frozen.
bandwidth_type	String	Bandwidth type. The bandwidth types are as follows: • **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	Bandwidth capacity, in Mbit/s.

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Parameter	Type	Description
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.
hosted_cloud	String	• **HWCloud**: Huawei Cloud • **Ireland**: Ireland site
approved_state	String	Approval status. • **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 about 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}
```

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Example Responses

Status code: 200

The details about 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
```

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```
        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.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 = 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)
```

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```
        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 about the enterprise router route table on the central network have been queried.

Error Codes

See **Error Codes**.

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4.7.8 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 4-338 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 4-339 Request header parameters

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

Table 4-340 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.

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Table 4-341 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 4-342 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 4-343 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.

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Parameter	Type	Description
state	String	Central network connection status. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **DELETED** • **APPROVING** • **APPROVED** • **UNAPPROVED**
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.
central_network_id	String	Central network ID.
central_network_plane_id	String	ID of the central network plane.
global_connection_bandwidth_id	String	Global connection bandwidth ID.
is_frozen	Boolean	Whether the resource is frozen.
bandwidth_type	String	Bandwidth type. The bandwidth types are as follows: • **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	Bandwidth capacity, in Mbit/s.

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Parameter	Type	Description
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.
hosted_cloud	String	• **HWCloud**: Huawei Cloud • **Ireland**: Ireland site
approved_state	String	Approval status. • **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}
```

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```
{
  "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.*;
```

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```
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{
```

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```
        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**.

4.7.9 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 4-344 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

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Parameter	Mandatory	Type	Description
central_network_id	Yes	String	Central network ID.

Table 4-345 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.
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 strings	Resource ID. Multiple IDs can be queried.
name	No	Array of strings	The resource name used for query. Multiple names can be specified for query.
attachment_instance_type	No	Array of strings	Attachment type. Multiple attachment types can be queried.

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Parameter	Mandatory	Type	Description
state	No	Array of strings	Resource status. Multiple statuses can be used for query. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **DELETED** • **APPROVING** • **APPROVED** • **UNAPPROVED**
attachment_instance_id	No	Array of strings	Attachment 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_attachments	Array of **CentralNetworkAttachment** objects	List of connections on the central network.

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Table 4-348 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 4-349 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.
state	String	Central network connection status. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **DELETED** • **APPROVING** • **APPROVED** • **UNAPPROVED**
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.
central_network_id	String	Central network ID.

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Parameter	Type	Description
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: • **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	Bandwidth capacity, 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.

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Parameter	Type	Description
attachment_instance_region_id	String	Region ID of the resource used as an attachment on the central network.
attachment_instance_site_code	String	Site code of the resource used as an attachment on the central network.
enterprise_router_site_code	String	Site code of the enterprise router on a central network.
specification_value	CentralNetworkAttachmentSpecificationValueInfo object	Additional information about an attachment.

Table 4-350 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	• **HWCloud**: Huawei Cloud • **Ireland**: Ireland site
approved_state	String	Approval status. • **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",
```

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```
 "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");
```

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```
        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 (
```

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```
    "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**.

4.7.10 Removing an Attachment from a Central Network

Function

This API is used to remove an attachment from a central network.

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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 4-351 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 4-352 Request header parameters

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

Response Parameters

Status code: 202

Table 4-353 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 4-354 CentralNetworkAttachment

Parameter	Type	Description
id	String	Instance ID.

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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. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **DELETED** • **APPROVING** • **APPROVED** • **UNAPPROVED**
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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.

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Parameter	Type	Description
bandwidth_type	String	Bandwidth type. The bandwidth types are as follows: • **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	Bandwidth capacity, 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.

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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 4-355 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	• **HWCloud**: Huawei Cloud • **Ireland**: Ireland site
approved_state	String	Approval status. • **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 has been removed from the 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",
```

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```
  "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"
  }
 }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

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


public class DeleteCentralNetworkAttachmentSolution {

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

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

        CcClient client = CcClient.newBuilder()
                .withCredential(auth)
                .withRegion(CcRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteCentralNetworkAttachmentRequest request = new DeleteCentralNetworkAttachmentRequest();
        request.withCentralNetworkId("{central_network_id}");
        request.withAttachmentId("{attachment_id}");
        try {
```

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```
            DeleteCentralNetworkAttachmentResponse response =
client.deleteCentralNetworkAttachment(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

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 = DeleteCentralNetworkAttachmentRequest()
        request.central_network_id = "{central_network_id}"
        request.attachment_id = "{attachment_id}"
        response = client.delete_central_network_attachment(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

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

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
```

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```
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

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

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

    request := &model.DeleteCentralNetworkAttachmentRequest{}
    request.CentralNetworkId = "{central_network_id}"
    request.AttachmentId = "{attachment_id}"
    response, err := client.DeleteCentralNetworkAttachment(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
202	The attachment has been removed from the central network.

Error Codes

See **Error Codes**.

4.8 Central Network Connections

4.8.1 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.

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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 4-356 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 returned on each page. The value ranges from 1 to 2000.
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.

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Parameter	Mandatory	Type	Description
id	No	Array of strings	Resource ID. Multiple IDs can be queried.
name	No	Array of strings	The resource name used for query. Multiple names can be specified for query.
state	No	Array of strings	Resource status. Multiple statuses can be used for query. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **DELETED** • **APPROVING** • **APPROVED** • **UNAPPROVED**
global_connection_bandwidth_id	No	Array of strings	Bandwidth package IDs.
bandwidth_type	No	Object	Bandwidth type. The bandwidth types are as follows: • **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.

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Parameter	Mandatory	Type	Description
connection_type	No	Object	Type of a central network connection. Multiple types can be used for query. • **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
is_cross_region	No	Boolean	Whether there are different regions.

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_connections	Array of **CentralNetworkConnection** objects	List of the central network connections.

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Table 4-360 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 4-361 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.
bandwidth_type	String	Bandwidth type. The bandwidth types are as follows: • **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	Bandwidth capacity, in Mbit/s.

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Parameter	Type	Description
state	String	Central network connection status. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **DELETED** • **APPROVING** • **APPROVED** • **UNAPPROVED**
is_frozen	Boolean	Whether the resource is frozen.
connection_type	String	Type of a central network connection. • **ER-ER**: peering connection between enterprise routers • **ER-GDGW**: connection between an enterprise router and a global DC gateway • **ER-ER_ROUTE_TABLE**: connection between an enterprise router and an enterprise router route table
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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.

Table 4-362 ConnectionPoint

Parameter	Type	Description
id	String	Instance ID.
project_id	String	Project ID.

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Parameter	Type	Description
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 the resource that can be added to a central network as an attachment. • **ER**: enterprise router • **GDGW**: global DC gateway • **ER_ROUTE_TABLE**: 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"
```


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```
  } ],
  "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
```

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```
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 = 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)
```

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```
    } 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**.

4.8.2 Modifying the Bandwidth of a Central Network Connection

Function

This API is used to update a central network connection. Only the bandwidth capacity can be modified.

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 4-363 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.

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Request Parameters

Table 4-364 Request header parameters

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

Table 4-365 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 bandwidth capacity 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 **Traffic** or **BandwidthPackage** (the sum of cross-site connection bandwidths cannot exceed the capacity of the bandwidth package) and is not specified if **bandwidth_type** is set to **TestBandwidth**

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Table 4-366 UpdateCentralNetworkConnection

Parameter	Mandatory	Type	Description
bandwidth_type	Yes	String	Bandwidth type. The bandwidth types are as follows: • **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.
bandwidth_size	No	Integer	Bandwidth capacity, in Mbit/s.

Response Parameters

Status code: 202

Table 4-367 Response body parameters

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

Table 4-368 CentralNetworkConnection

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

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Parameter	Type	Description
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.
bandwidth_type	String	Bandwidth type. The bandwidth types are as follows: • **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	Bandwidth capacity, in Mbit/s.
state	String	Central network connection status. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **DELETED** • **APPROVING** • **APPROVED** • **UNAPPROVED**
is_frozen	Boolean	Whether the resource is frozen.

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Parameter	Type	Description
connection_type	String	Type of a central network connection. • **ER-ER**: peering connection between enterprise routers • **ER-GDGW**: connection between an enterprise router and a global DC gateway • **ER-ER_ROUTE_TABLE**: connection between an enterprise router and an enterprise router route table
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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.

Table 4-369 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 the resource that can be added to a central network as an attachment. • **ER**: enterprise router • **GDGW**: global DC gateway • **ER_ROUTE_TABLE**: enterprise router route table

Example Requests

Updating a cross-site connection on a central network

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```
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 central network connection has been updated.

```
{
  "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.*;
```

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```
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
```

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```
variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in 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}"
```

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```
    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 central network connection has been updated.

Error Codes

See **Error Codes**.

4.9 Central Network Policies

4.9.1 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

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Table 4-370 Path Parameters

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

Request Parameters

Table 4-371 Request header parameters

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

Table 4-372 Request body parameters

Parameter	Mandatory	Type	Description
central_network_policy_document	Yes	**CentralNetworkPolicyDocument** object	Central network policy document.

Table 4-373 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 **AssociateErInstanceDocument** objects	List of the enterprise routers on a central network.

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Table 4-374 CentralNetworkPlaneDocument

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

Table 4-375 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 4-376 ExcludeErConnectionDocument

Parameter	Mandatory	Type	Description
[items]	No	Array of **AssociateErInstanceDocument** objects	Connections between enterprise routers managed by the central network plane.

Table 4-377 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.

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Response Parameters

Status code: 201

Table 4-378 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
central_network_policy	**CentralNetworkPolicy** object	Details of the central network policy.

Table 4-379 CentralNetworkPolicy

Parameter	Type	Description
id	String	Instance ID.
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
domain_id	String	ID of the account that the instance belongs to.
state	String	Central network policy status. • **AVAILABLE** • **CANCELING** • **APPLYING** • **FAILED** • **DELETED**
central_network_id	String	Central network ID.
document_template_version	String	Document template version. • **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.

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Table 4-380 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 a central network.

Table 4-381 CentralNetworkPlaneDocument

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

Table 4-382 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.

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Table 4-383 ExcludeErConnectionDocument

Parameter	Type	Description
[items]	Array of **AssociateErInstanceDocument** objects	Connections between enterprise routers managed by the central network plane.

Table 4-384 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",
```

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```
    "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")
```

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```
            .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"
            )
```

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```
        ]
        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",
        },
```

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```
    }
    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**.

4.9.2 Querying the List of Central Network Policies

Function

This API is used to query the list of 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

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Table 4-385 Path Parameters

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

Table 4-386 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.
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 strings	Resource ID. Multiple IDs can be queried.

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Parameter	Mandatory	Type	Description
state	No	Array of strings	Resource status. Multiple statuses can be used for query. • **AVAILABLE** • **CANCELING** • **APPLYING** • **FAILED** • **DELETED**
version	No	Array of integers	The version used for query. Multiple versions can be specified for query.
is_applied	No	Boolean	Whether the policy is applied or not.

Request Parameters

Table 4-387 Request header parameters

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

Response Parameters

Status code: 200

Table 4-388 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 4-389 PageInfo

Parameter	Type	Description
next_marker	String	Backward pagination identifier.

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

Table 4-390 CentralNetworkPolicy

Parameter	Type	Description
id	String	Instance ID.
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
domain_id	String	ID of the account that the instance belongs to.
state	String	Central network policy status. • **AVAILABLE** • **CANCELING** • **APPLYING** • **FAILED** • **DELETED**
central_network_id	String	Central network ID.
document_template_version	String	Document template version. • **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 4-391 CentralNetworkPolicyDocument

Parameter	Type	Description
default_plane	String	Name of the default central network plane.

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Parameter	Type	Description
planes	Array of **CentralNetworkPlaneDocument** objects	List of the central network planes.
er_instances	Array of **AssociateErInstanceDocument** objects	List of the enterprise routers on a central network.

Table 4-392 CentralNetworkPlaneDocument

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

Table 4-393 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.

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Table 4-394 ExcludeErConnectionDocument

Parameter	Type	Description
[items]	Array of **AssociateErInstanceDocument** objects	Connections between enterprise routers managed by the central network plane.

Table 4-395 AssociateErInstanceDocument

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

Example Requests

Querying the list of central network policies

```
GET /v3/{domain_id}/gcn/central-network/{central_network_id}/policies
```

Example Responses

Status code: 200

The list of central network policies 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",
```


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```
      "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
```

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```
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 = 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 {
```

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```
        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 policies has been queried.

Error Codes

See **Error Codes**.

4.9.3 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 4-396 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.

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Request Parameters

Table 4-397 Request header parameters

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

Response Parameters

Status code: 202

Table 4-398 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 4-399 CentralNetworkPolicy

Parameter	Type	Description
id	String	Instance ID.
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
domain_id	String	ID of the account that the instance belongs to.
state	String	Central network policy status. • **AVAILABLE** • **CANCELING** • **APPLYING** • **FAILED** • **DELETED**
central_network_id	String	Central network ID.

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Parameter	Type	Description
document_template_version	String	Document template version. • **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 4-400 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 a central network.

Table 4-401 CentralNetworkPlaneDocument

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

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Table 4-402 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 4-403 ExcludeErConnectionDocument

Parameter	Type	Description
[items]	Array of **AssociateErInstanceDocument** objects	Connections between enterprise routers managed by the central network plane.

Table 4-404 AssociateErInstanceDocument

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

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Table 4-405 CentralNetworkElementChange

Parameter	Type	Description
operation_id	String	Operation on a central network. • **CreateCentralNetworkPlane**: Add a central network plane. • **DeleteCentralNetworkPlane**: Remove a central network plane. • **UpdateCentralNetworkPlane**: Update a central network plane. • **CreateCentralNetworkErInstance**: Add an enterprise router as an attachment on a central network. • **DeleteCentralNetworkErInstance**: Remove an enterprise router from a central network. • **CreateCentralNetworkErConnection**: Create a connection between enterprise routers on a central network. • **DeleteCentralNetworkErConnection**: Delete a connection between enterprise routers from a central network. • **CreateCentralNetworkErTable**: Add an enterprise router route table as an attachment on a central network. • **DeleteCentralNetworkErTable**: Remove an enterprise router route table from a central network. • **SwitchCentralNetworkErTable**: Change an 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" : {
```

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```
  "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-9dccb5da21c0"
      } ]
    } ],
    "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-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",
```


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```
      "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;
```

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```
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.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()
```

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```
    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.

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Status Codes

Status Code	Description
202	The central network policy has been applied.

Error Codes

See **Error Codes**.

4.9.4 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 4-406 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 4-407 Request header parameters

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

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Response Parameters

Status code: 204

Table 4-408 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 {
```

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```
            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
```

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```
variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment 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**.

4.9.5 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.

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URI

GET /v3/{domain_id}/gcn/central-network/{central_network_id}/policies/{policy_id}/change-set

Table 4-409 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 4-410 Request header parameters

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

Response Parameters

Status code: 200

Table 4-411 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 4-412 PageInfo

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

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

Table 4-413 CentralNetworkElementChange

Parameter	Type	Description
operation_id	String	Operation on a central network. • **CreateCentralNetworkPlane**: Add a central network plane. • **DeleteCentralNetworkPlane**: Remove a central network plane. • **UpdateCentralNetworkPlane**: Update a central network plane. • **CreateCentralNetworkErInstance**: Add an enterprise router as an attachment on a central network. • **DeleteCentralNetworkErInstance**: Remove an enterprise router from a central network. • **CreateCentralNetworkErConnection**: Create a connection between enterprise routers on a central network. • **DeleteCentralNetworkErConnection**: Delete a connection between enterprise routers from a central network. • **CreateCentralNetworkErTable**: Add an enterprise router route table as an attachment on a central network. • **DeleteCentralNetworkErTable**: Remove an enterprise router route table from a central network. • **SwitchCentralNetworkErTable**: Change an 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
```

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Example Responses

Status code: 200

Changes between the current policy and applied policy have been queried.


```
{
  "request_id" : "a334adc3e2cba87855de6f3ab58b9db5",
  "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",
```


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```
    "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 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");
```

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```
        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)
```

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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**.

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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 4-414 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-415 Request header parameters

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

Table 4-416 Request body parameters

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

Table 4-417 CreateP2PSiteNetwork

Parameter	Mandatory	Type	Description
name	Yes	String	Instance name.

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Parameter	Mandatory	Type	Description
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 a P2P site network. The length is fixed to an array of 2.

Table 4-418 Tag

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

Table 4-419 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

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Table 4-420 Response body parameters

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

Table 4-421 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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.
domain_id	String	ID of the account that the instance belongs to.
state	String	Site network status. • **AVAILABLE** • **UPDATING** • **FAILED** • **CREATING** • **DELETING** • **DELETED** • **NON-COMPLETE**: The configuration is incomplete. • **RESTORING**
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.

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Parameter	Type	Description
topology	String	Site network topology. • **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 4-422 Tag

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

Table 4-423 SiteConnection

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

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Parameter	Type	Description
state	String	Site-to-site connection status. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **FREEZED** • **DELETED**
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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	Communications within a region or between regions. • **intra-region**: communications within a region • **inter-region**: communications between regions
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Bandwidth capacity, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.
frozen_effect	String	Resource frozen effect. • **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.

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Table 4-424 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 4-425 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"
    } ]
  }
}
```

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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 listP2pSiteNetworkSites = new ArrayList<>();
```

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```
        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.withName("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(
```

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```
            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,
```

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```
            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.

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URI

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

Table 4-426 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-427 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.
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 strings	Resource ID. Multiple IDs can be queried.
name	No	Array of strings	The resource name used for query. Multiple names can be specified for query.

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Parameter	Mandatory	Type	Description
state	No	Array of strings	Resource status. Multiple statuses can be used for query. • **AVAILABLE** • **UPDATING** • **FAILED** • **CREATING** • **DELETING** • **DELETED** • **NON-COMPLETE**: The configuration is incomplete. • **RESTORING**
enterprise_project_id	No	Array of strings	Enterprise project IDs.
global_dc_gateway_id	No	Array of strings	Global DC gateway IDs.
global_connection_bandwidth_id	No	Array of strings	Bandwidth package IDs.
connection_id	No	Array of strings	Site-to-site connection ID.

Request Parameters

Table 4-428 Request header parameters

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

Response Parameters

Status code: 200

Table 4-429 Response body parameters

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

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

Table 4-430 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 4-431 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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.
domain_id	String	ID of the account that the instance belongs to.
state	String	Site network status. • **AVAILABLE** • **UPDATING** • **FAILED** • **CREATING** • **DELETING** • **DELETED** • **NON-COMPLETE**: The configuration is incomplete. • **RESTORING**

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Parameter	Type	Description
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. • **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 4-432 Tag

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

Table 4-433 SiteConnection

Parameter	Type	Description
id	String	Instance ID.

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Parameter	Type	Description
site_network_id	String	Site network ID.
state	String	Site-to-site connection status. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **FREEZED** • **DELETED**
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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	Communications within a region or between regions. • **intra-region**: communications within a region • **inter-region**: communications between regions
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Bandwidth capacity, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.
frozen_effect	String	Resource frozen effect. • **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.

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Table 4-434 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 4-435 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

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**.

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4.10.3 Querying a Site Network

Function

This API is used to query the details about 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 4-436 Path Parameters

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

Request Parameters

Table 4-437 Request header parameters

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

Response Parameters

Status code: 200

Table 4-438 Response body parameters

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

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Table 4-439 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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.
domain_id	String	ID of the account that the instance belongs to.
state	String	Site network status. • **AVAILABLE** • **UPDATING** • **FAILED** • **CREATING** • **DELETING** • **DELETED** • **NON-COMPLETE**: The configuration is incomplete. • **RESTORING**
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. • **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.

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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 4-440 Tag

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

Table 4-441 SiteConnection

Parameter	Type	Description
id	String	Instance ID.
site_network_id	String	Site network ID.
state	String	Site-to-site connection status. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **FREEZED** • **DELETED**

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Parameter	Type	Description
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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	Communications within a region or between regions. • **intra-region**: communications within a region • **inter-region**: communications between regions
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Bandwidth capacity, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.
frozen_effect	String	Resource frozen effect. • **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 4-442 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.

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Table 4-443 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

Querying a site network

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

Example Responses

Status code: 200

The details about 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,
```


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```
    "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());
```

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```
            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 = 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()
```

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```
    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	The details about 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 4-444 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

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Parameter	Mandatory	Type	Description
site_network_id	Yes	String	Site network ID.

Request Parameters

Table 4-445 Request header parameters

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

Table 4-446 Request body parameters

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

Table 4-447 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 4-448 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	The tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).

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Parameter	Mandatory	Type	Description
value	No	String	The 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 4-449 Response body parameters

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

Table 4-450 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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.
domain_id	String	ID of the account that the instance belongs to.

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Parameter	Type	Description
state	String	Site network status. • **AVAILABLE** • **UPDATING** • **FAILED** • **CREATING** • **DELETING** • **DELETED** • **NON-COMPLETE**: The configuration is incomplete. • **RESTORING**
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. • **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.

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Table 4-451 Tag

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

Table 4-452 SiteConnection

Parameter	Type	Description
id	String	Instance ID.
site_network_id	String	Site network ID.
state	String	Site-to-site connection status. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **FREEZED** • **DELETED**
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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.

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Parameter	Type	Description
cross_region_type	String	Communications within a region or between regions. • **intra-region**: communications within a region • **inter-region**: communications between regions
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Bandwidth capacity, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.
frozen_effect	String	Resource frozen effect. • **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 4-453 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 4-454 SiteInformation

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

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Parameter	Type	Description
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",
```

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```
      "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();
```

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```
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException 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 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 = 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.

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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 4-455 Path Parameters

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

Request Parameters

Table 4-456 Request header parameters

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

Response Parameters

Status code: 202

Table 4-457 Response body parameters

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

Table 4-458 SiteNetworkEntry

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

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Parameter	Type	Description
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.
domain_id	String	ID of the account that the instance belongs to.
state	String	Site network status. • **AVAILABLE** • **UPDATING** • **FAILED** • **CREATING** • **DELETING** • **DELETED** • **NON-COMPLETE**: The configuration is incomplete. • **RESTORING**
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. • **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.

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Table 4-459 Tag

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

Table 4-460 SiteConnection

Parameter	Type	Description
id	String	Instance ID.
site_network_id	String	Site network ID.
state	String	Site-to-site connection status. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **FREEZED** • **DELETED**
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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.

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Parameter	Type	Description
cross_region_type	String	Communications within a region or between regions. • **intra-region**: communications within a region • **inter-region**: communications between regions
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Bandwidth capacity, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.
frozen_effect	String	Resource frozen effect. • **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 4-461 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 4-462 SiteInformation

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

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Parameter	Type	Description
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",
```


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

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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())
```

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```
    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 Global Connection Bandwidth from a Site-to-Site Connection

Function

This API is used to unbind global connection bandwidth 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

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Table 4-463 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 4-464 Request header parameters

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

Response Parameters

Status code: 202

Table 4-465 Response body parameters

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

Table 4-466 SiteConnection

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

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Parameter	Type	Description
state	String	Site-to-site connection status. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **FREEZED** • **DELETED**
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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	Communications within a region or between regions. • **intra-region**: communications within a region • **inter-region**: communications between regions
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Bandwidth capacity, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.
frozen_effect	String	Resource frozen effect. • **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.

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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.

Example Requests

Unbinding a global connection bandwidth from a site-to-site connection

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

Example Responses

Status code: 202

The global connection bandwidth 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.

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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.
```

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```
    # In this example, AK and SK are stored in 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)
    }
}
```

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

Error Codes

See **Error Codes**.

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

Function

This API is used to bind a global connection bandwidth 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 4-468 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.

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Request Parameters

Table 4-469 Request header parameters

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

Table 4-470 Request body parameters

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

Table 4-471 AssociateSiteConnectionBandwidth

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

Response Parameters

Status code: 202

Table 4-472 Response body parameters

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

Table 4-473 SiteConnection

Parameter	Type	Description
id	String	Instance ID.

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Parameter	Type	Description
site_network_id	String	Site network ID.
state	String	Site-to-site connection status. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **FREEZED** • **DELETED**
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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	Communications within a region or between regions. • **intra-region**: communications within a region • **inter-region**: communications between regions
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Bandwidth capacity, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.
frozen_effect	String	Resource frozen effect. • **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.

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Table 4-474 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 global connection bandwidth 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 global connection bandwidth 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"
    } ]
```

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```
    }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Binding a global connection bandwidth 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());
        }
```

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```
    }
}
```

Python

Binding a global connection bandwidth 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 global connection bandwidth 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.
```

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```
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment 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 global connection bandwidth has been bound to the site-to-site connection.

Error Codes

See **Error Codes**.

4.11.3 Changing the Bandwidth Capacity for a Site-to-Site Connection

Function

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

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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 4-475 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 4-476 Request header parameters

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

Table 4-477 Request body parameters

Parameter	Mandatory	Type	Description
site_connection	Yes	**UpdateSiteConnectionBandwidthSize** object	Request body for changing the bandwidth capacity for a site-to-site connection.

Table 4-478 UpdateSiteConnectionBandwidthSize

Parameter	Mandatory	Type	Description
bandwidth_size	No	Integer	Bandwidth capacity, in Mbit/s.

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Response Parameters

Status code: 202

Table 4-479 Response body parameters

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

Table 4-480 SiteConnection

Parameter	Type	Description
id	String	Instance ID.
site_network_id	String	Site network ID.
state	String	Site-to-site connection status. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **FREEZED** • **DELETED**
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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.

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Parameter	Type	Description
cross_region_type	String	Communications within a region or between regions. • **intra-region**: communications within a region • **inter-region**: communications between regions
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Bandwidth capacity, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.
frozen_effect	String	Resource frozen effect. • **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 4-481 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 capacity for 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
  }
}
```

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Example Responses

Status code: 202

The bandwidth capacity been changed for 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

Changing the bandwidth capacity for 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()
```

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```
            .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 capacity for 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
```

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```
        )
        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 capacity for 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.

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Status Codes

Status Code	Description
202	The bandwidth capacity been changed for the site-to-site connection.

Error Codes

See **Error Codes**.

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

Function

This API is used to change the global connection 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

Table 4-482 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 4-483 Request header parameters

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

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Table 4-484 Request body parameters

Parameter	Mandatory	Type	Description
site_connection	Yes	**UpdateSiteConnectionBandwidth** object	Request body for changing global connection bandwidth of a site-to-site connection.

Table 4-485 UpdateSiteConnectionBandwidth

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

Response Parameters

Status code: 202

Table 4-486 Response body parameters

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

Table 4-487 SiteConnection

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

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Parameter	Type	Description
state	String	Site-to-site connection status. • **AVAILABLE** • **CREATING** • **UPDATING** • **DELETING** • **FREEZING** • **UNFREEZING** • **RECOVERING** • **FAILED** • **FREEZED** • **DELETED**
created_at	String	Time when the resource was created. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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	Communications within a region or between regions. • **intra-region**: communications within a region • **inter-region**: communications between regions
global_connection_bandwidth_id	String	Global connection bandwidth ID.
bandwidth_size	Integer	Bandwidth capacity, in Mbit/s.
is_frozen	Boolean	Whether the resource is frozen.
frozen_effect	String	Resource frozen effect. • **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.

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Table 4-488 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 global connection bandwidth 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 global connection 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"
    } ]
```

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```
 }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Changing the global connection 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 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();
        UpdateSiteConnectionBandwidthRequestBody body = new UpdateSiteConnectionBandwidthRequestBody();
        UpdateSiteConnectionBandwidth siteConnectionbody = new UpdateSiteConnectionBandwidth();
        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());
        }
    }
}
```

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Python

Changing the global connection 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 = UpdateSiteNetworkBandwidthRequest()
        request.site_network_id = "{site_network_id}"
        request.site_connection_id =
        siteConnectionbody = UpdateSiteConnectionBandwidth(
            global_connection_bandwidth_id="a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
            bandwidth_size=20
        )
        request.body = UpdateSiteConnectionBandwidthRequestBody(
            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 global connection 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")
```

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```
    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.UpdateSiteConnectionBandwidth{
        GlobalConnectionBandwidthId: &globalConnectionBandwidthIdSiteConnection,
        BandwidthSize: &bandwidthSizeSiteConnection,
    }
    request.Body = &model.UpdateSiteConnectionBandwidthRequestBody{
        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 global connection bandwidth 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.

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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 4-489 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-490 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.
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.

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Parameter	Mandatory	Type	Description
quota_type	No	String	Quota type. • **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 4-491 Request header parameters

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

Response Parameters

Status code: 200

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Table 4-492 Response body parameters

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

Table 4-493 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. • **cloud_connection**: the number of cloud connections that can be loaded • **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	Quotas.
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.

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```
{
  "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());
        }
    }
}
```

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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{}
```

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```
    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 Cloud Connection Capabilities

4.13.1 Querying Cloud Connect Capabilities

Function

This API is used to query Cloud Connect 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}/ccaas/capabilities

Table 4-494 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

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Table 4-495 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.
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.
resource_type	No	String	Resource type.

Request Parameters

Table 4-496 Request header parameters

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

Response Parameters

Status code: 200

Table 4-497 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.

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Parameter	Type	Description
capabilities	Array of **CloudConnectionCapabilityInfo** objects	List of cloud connection capabilities.

Table 4-498 CloudConnectionCapabilityInfo

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

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Parameter	Type	Description
resource_type	String	Product capabilities for tenants. The options can be: • **v2**: V2 APIs • **v3**: V3 APIs • **billing_mode_period_reduce**: immediate specification downgrade (yearly/monthly subscription) • **billing_mode_demand**: pay-per-use billing • **bwp95**: pay-per-use billing (95th percentile billing) • **bwp95Avg**: pay-per-use billing (daily 95th percentile billing) • **network-quality**: monitoring of packet loss rate and network latency • **er**: support for enterprise routers or not • **domain_bandwidth**: tenant bandwidth • **ipv6**: support for IPv6 or not • **ipv6_support_regions**: regions where IPv6 is supported • **enterprise-cloud-connection.is-support**: support for enterprise-grade cloud connections • **enterprise-cloud-connection.support-sites**: list of sites that support enterprise-grade cloud connections • **enterprise-cloud-connection-segment.is-support**: support for enterprise-grade cloud connection segment • **enterprise-cloud-connection-dc-gateway-attachment.is-support**: DC gateways as attachments on an enterprise-grade cloud connection supported
is_support	Boolean	Whether cloud connection capabilities are supported.
bandwidth	**CloudConnectionDomainBandwidthValue** object	Bandwidth.

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Parameter	Type	Description
support_regions	Array of strings	List of regions available to a tenant.
support_sites	Array of strings	List of sites available to a tenant.

Table 4-499 CloudConnectionDomainBandwidthValue

Parameter	Type	Description
min	Integer	Minimum bandwidth.
max	Integer	Maximum bandwidth.

Example Requests

Querying Cloud Connect capabilities

```
GET https://{cc_endpoint}/v3/{domain_id}/ccaas/capabilities
```

Example Responses

Status code: 200

Cloud Connect capabilities have been queried.

```
{
  "request_id" : "XXX",
  "capabilities" : [ {
    "id" : "a3bad420-33b8-4e26-9e9b-bdf67aa8e72b",
    "domain_id" : 6,
    "resource_type" : "er"
  } ]
}
```

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 ListCloudConnectionCapabilitiesSolution {

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

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```
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_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();
        ListCloudConnectionCapabilitiesRequest request = new ListCloudConnectionCapabilitiesRequest();
        try {
            ListCloudConnectionCapabilitiesResponse response = client.listCloudConnectionCapabilities(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException 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 = ListCloudConnectionCapabilitiesRequest()
        response = client.list_cloud_connection_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)
```

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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.ListCloudConnectionCapabilitiesRequest{}
    response, err := client.ListCloudConnectionCapabilities(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 Connect capabilities have been queried.

Error Codes

See **Error Codes**.

4.14 Central Network Quotas

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4.14.1 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 strings	Quota type. Multiple quota types can be queried.
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.
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.

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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.

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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
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
```

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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());
```

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```
        }
    }
}
```

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"
    "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>")).
```

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```
        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**.

4.15 Central Network Capabilities

4.15.1 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.

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Table 4-506 Query Parameters

Parameter	Mandatory	Type	Description
capability	No	Array of strings	Capabilities. Multiple capabilities can be queried.
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.
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.

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Parameter	Type	Description
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.

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Parameter	Type	Description
capability	String	Central network capabilities. • **central-network.is-support**: central networks • **central-network.is-support-enterprise-project**: enterprise projects for central networks • **central-network.is-support-tag**: central network tagging • **central-network.is-support-custom-er-table**: custom route tables on central networks • **connection-bandwidth.size-range**: bandwidth capacity 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

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Parameter	Type	Description
		• **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" : [ {
```

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```
    "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
```

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```
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 {
```

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```
        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**.

4.16 Site Network Quotas

4.16.1 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.

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Table 4-512 Query Parameters

Parameter	Mandatory	Type	Description
quota_type	No	Array of strings	Quota type. Multiple quota types can be queried.
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.
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.

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Parameter	Type	Description
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"
  } ]
}
```

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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
```

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```
variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in 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 = 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.

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Status Codes

Status Code	Description
200	Site network quotas have been queried.

Error Codes

See **Error Codes**.

4.17 Site Network Capabilities

4.17.1 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 strings	Site network capabilities. Multiple capabilities can be queried.
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.

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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.

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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.

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Parameter	Type	Description
specification	String	Site network capabilities. • **site-network.is-support**: site networks • **site-network.is-support-enterprise-project**: enterprise projects for site networks • **site-network.is-support-tag**: site network tagging • **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**: capacity 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 site network tagging is supported.
is_support_intra_region	Boolean	Whether site networks in the same region can be created.

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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
  }, {
```


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```
    "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");
```

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```
        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"
```

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```
    "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**.

4.18 Specifications

4.18.1 Querying Supported Regions

Function

This API is used to query supported regions.

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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/regions

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 returned on each page. The value ranges from 1 to 2000.
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 4-525 Request header parameters

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

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Response Parameters

Status code: 200

Table 4-526 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
page_info	**PageInfo** object	Pagination query information.
regions	Array of **Region** objects	Region list.

Table 4-527 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 4-528 Region

Parameter	Type	Description
name	String	Instance name.
area_id	String	Geographic region. Cloud Connect is available in the following geographic regions: • **Chinese-Mainland**: Chinese mainland • **Asia-Pacific**: Asia Pacific • **Africa**: Africa • **Western-Latin-America**: Western Latin America • **Eastern-Latin-America**: Eastern Latin America • **Northern-Latin-America**: Northern Latin America
id	String	Region ID.
area_name	String	Geographic region.

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Parameter	Type	Description
used_scenes	Array of strings	Cloud Connect application scenarios. The options can be: • **er**: enterprise router • **vpc**: VPC • **vgw**: virtual gateway

Example Requests

Querying supported regions.

```
GET https://{cc_endpoint}/v3/{domain_id}/ccaas/regions
```

Example Responses

Status code: 200

Supported regions queried.

```
{
  "request_id" : "XXX",
  "regions" : [ {
    "id" : "region-abc",
    "name" : "region-name",
    "area_id" : "area-abc",
    "area_name" : "area-name",
    "used_scenes" : [ "vpc" ]
  } ]
}
```

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 ListRegionsSolution {

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

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

        CcClient client = CcClient.newBuilder()
                .withCredential(auth)
                .withRegion(CcRegion.valueOf("<YOUR REGION>"))
                .build();
        ListRegionsRequest request = new ListRegionsRequest();
        try {
            ListRegionsResponse response = client.listRegions(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException 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 = ListRegionsRequest()
        response = client.list_regions(request)
        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"
```

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```
    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.ListRegionsRequest{}
    response, err := client.ListRegions(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	Supported regions queried.

Error Codes

See **Error Codes**.

4.18.2 Querying Supported Geographic Regions

Function

This API is used to query the supported geographic regions.

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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/areas

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 returned on each page. The value ranges from 1 to 2000.
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 4-531 Request header parameters

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

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Response Parameters

Status code: 200

Table 4-532 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
page_info	**PageInfo** object	Pagination query information.
areas	Array of **Area** objects	Geographic region list.

Table 4-533 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 4-534 Area

Parameter	Type	Description
name	String	Instance name.
id	String	Geographic region ID.
en_name	String	Geographic region name in English.
es_name	String	Geographic region name in Spanish.
pt_name	String	Geographic region name in Portuguese.
station	String	Site.

Example Requests

Querying supported geographic regions

```
GET https://{cc_endpoint}/v3/{domain_id}/ccaas/areas
```

Example Responses

Status code: 200

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Supported geographic regions queried.

```
{
  "request_id" : "XXX",
  "areas" : [ {
    "id" : "area-abc",
    "name" : "area-name",
    "station" : "station",
    "en_name" : "area-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 ListAreasSolution {

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

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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 = ListAreasRequest()
        response = client.list_areas(request)
        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.ListAreasRequest{}
```

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```
    response, err := client.ListAreas(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	Supported geographic regions queried.

Error Codes

See **Error Codes**.

4.18.3 Querying the Specifications of Bandwidth Packages for Cross-Region Communication

Function

This API is used to query the specifications of bandwidth packages for communications across regions.

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/region-specifications

Table 4-535 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

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Table 4-536 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.
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.
local_region_id	No	String	ID of a region for querying the list of multi-city bandwidth package configurations.
remote_region_id	No	String	ID of another region for querying the list of multi-city bandwidth package configurations.

Request Parameters

Table 4-537 Request header parameters

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

Response Parameters

Status code: 200

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Table 4-538 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
page_info	**PageInfo** object	Pagination query information.
region_specifications	Array of **RegionBandwidthPackageSpecification** objects	List of the multi-city bandwidth package specifications.

Table 4-539 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 4-540 RegionBandwidthPackageSpecification

Parameter	Type	Description
local_region_id	String	Region ID.
remote_region_id	String	Region ID.
id	String	Specification ID of the bandwidth package for communications between regions.
name	String	Specification name of the bandwidth package for communications between regions.
en_name	String	Name of the bandwidth package for communications between regions.
es_name	String	Specification name in Spanish of the bandwidth package for communications between regions.
pt_name	String	Specification name in Portuguese of the bandwidth package for communications between regions.

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Parameter	Type	Description
spec_codes	Array of SpecificationCodeInfo objects	List of the bandwidth package specifications.

Table 4-541 SpecificationCodeInfo

Parameter	Type	Description
spec_code	String	Specification code of the bandwidth package.
billing_mode	Integer	Billing mode of the bandwidth package on the Chinese mainland website or the International website. • **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 • **7**: daily 95th percentile bandwidth billing on the Chinese mainland website • **8**: daily 95th percentile bandwidth billing on the International website
max_bandwidth	Long	Maximum bandwidth.
mim_bandwidth	Long	Minimum bandwidth.

Example Requests

Querying the configurations of multi-city bandwidth packages of a user

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

Example Responses

Status code: 200

The configurations of multi-city bandwidth packages of a user queried.

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```
{
  "request_id" : "XXX",
  "region_specifications" : [ {
    "id" : "XXX",
    "local_region_id" : "region-abc",
    "remote_region_id" : "region-abc",
    "name" : "name",
    "en_name" : "name",
    "spec_codes" : [ {
      "billing_mode" : 1,
      "spec_code" : "bandwidth.abctoabc",
      "max_bandwidth" : 100,
      "mim_bandwidth" : 0
    } ]
  } ],
  "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 ListRegionBandwidthPackageSpecificationsSolution {

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

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```
            e.printStackTrace();
        } catch (ServiceResponseException 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 = ListRegionBandwidthPackageSpecificationsRequest()
        response = client.list_region_bandwidth_package_specifications(request)
        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().
```

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

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

    request := &model.ListRegionBandwidthPackageSpecificationsRequest{}
    response, err := client.ListRegionBandwidthPackageSpecifications(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 configurations of multi-city bandwidth packages of a user queried.

Error Codes

See **Error Codes**.

4.18.4 Querying the Specifications of Bandwidth Packages for Cross-Geographic-Region Communication

Function

This API is used to query the specifications of bandwidth packages for communications across geographic regions.

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/area-specifications

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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 returned on each page. The value ranges from 1 to 2000.
offset	No	Integer	The index offset. The query starts from the next piece of data indexed by this parameter. This parameter is not required when you query the resources on the first page. The value in the response returned for querying the resources on the previous page will be included in this parameter for querying the resources on subsequent pages. This parameter is not available when **action** is set to **count**. If **action** is set to **filter**, the value must be a positive integer, and the default value is **0**.
local_area_id	No	Array of strings	ID of a geographic region for querying the list of bandwidth package specifications.
remote_area_id	No	Array of strings	ID of another geographic region for querying the list of bandwidth package specifications.

Request Parameters

Table 4-544 Request header parameters

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

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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.
area_specifications	Array of **AreaBandwidthPackageSpecification** objects	List of bandwidth package specifications in a geographic region.

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 AreaBandwidthPackageSpecification

Parameter	Type	Description
local_area_id	String	Local geographic region. Cloud Connect is available in the following geographic regions: • **Chinese-Mainland**: Chinese mainland • **Asia-Pacific**: Asia Pacific • **Africa**: Africa • **Western-Latin-America**: Western Latin America • **Eastern-Latin-America**: Eastern Latin America • **Northern-Latin-America**: Northern Latin America

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Parameter	Type	Description
remote_area_id	String	Remote geographic region. Cloud Connect is available in the following geographic regions: • **Chinese-Mainland**: Chinese mainland • **Asia-Pacific**: Asia Pacific • **Africa**: Africa • **Western-Latin-America**: Western Latin America • **Eastern-Latin-America**: Eastern Latin America • **Northern-Latin-America**: Northern Latin America
id	String	Bandwidth package specification ID.
spec_codes	Array of **SpecificationCodeInfo** objects	Bandwidth package specifications.

Table 4-548 SpecificationCodeInfo

Parameter	Type	Description
spec_code	String	Specification code of the bandwidth package.

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Parameter	Type	Description
billing_mode	Integer	Billing mode of the bandwidth package on the Chinese mainland website or the International website. • **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 • **7**: daily 95th percentile bandwidth billing on the Chinese mainland website • **8**: daily 95th percentile bandwidth billing on the International website
max_bandwidth	Long	Maximum bandwidth.
mim_bandwidth	Long	Minimum bandwidth.

Example Requests

Querying the specifications of bandwidth packages

```
GET https://{cc_endpoint}/v3/{domain_id}/ccaas/bandwidth-package/area-specifications
```

Example Responses

Status code: 200

Bandwidth package specifications queried.


```
{
  "request_id" : "XXX",
  "area_specifications" : [ {
    "id" : "XXX",
    "local_area_id" : "area-abc",
    "remote_area_id" : "area-abc",
    "spec_codes" : [ {
      "billing_mode" : 1,
      "spec_code" : "bandwidth.abctoabc",
      "max_bandwidth" : 100,
      "mim_bandwidth" : 0
    } ]
  } ],
  "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 ListAreaBandwidthPackageSpecificationsSolution {

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

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

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```
  }
}
```

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 package specifications queried.

Error Codes

See **Error Codes**.

4.18.5 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 4-549 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-550 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.

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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.
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 4-551 Request header parameters

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

Response Parameters

Status code: 200

Table 4-552 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.

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Table 4-553 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 *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Update time. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.

Table 4-554 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",
```

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

Python

```
# coding: utf-8
```

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```
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 = 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 {
```

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```
        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**.

4.18.6 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 4-555 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-556 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.

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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.
level	No	String	Bandwidth class for query.
name	No	String	Name used for fuzzy search.

Request Parameters

Table 4-557 Request header parameters

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

Response Parameters

Status code: 200

Table 4-558 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.

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Table 4-559 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. • 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 *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Update time. The UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.

Table 4-560 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" : [ {
```

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

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```
    }
}
```

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 = 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).
```

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```
        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**.

4.18.7 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 4-561 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

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Table 4-562 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.
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 4-563 Request header parameters

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

Response Parameters

Status code: 200

Table 4-564 Response body parameters

Parameter	Type	Description
bandwidth_package_lines	Array of **BandwidthPackageLine** objects	List of bandwidth package lines.

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

Table 4-565 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 4-566 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 4-567 PageInfo

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

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Parameter	Type	Description
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();
```

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```
        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 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 = 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
```

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```
variables and decrypted during use to ensure security.
   // In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment 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**.

4.19 Global Connection Bandwidths

4.19.1 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.

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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/gcbandwidths

Table 4-568 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-569 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.
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 strings	Resource ID. Multiple IDs can be queried.
name	No	Array of strings	The resource name used for query. Multiple names can be specified for query.
enterprise_project_id	No	Array of strings	Enterprise project IDs.

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Parameter	Mandatory	Type	Description
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. • **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. • **Cloud Connect**: cloud connection • **GEIP**: global EIP • **GCN**: central network • **GSN**: site network
type	No	Array of strings	Bandwidth type used for listing global connection bandwidths. • **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. • **NORMAL**: The global connection bandwidth is available. • **FREEZED**: The global connection bandwidth is frozen.

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Parameter	Mandatory	Type	Description
charge_mode	No	Array of strings	Billing option used for querying global connection bandwidths. • **bwd**: billed by bandwidth • **95**: standard 95th percentile bandwidth billing • **95avr**: average daily 95th percentile bandwidth billing

Request Parameters

Table 4-570 Request header parameters

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

Response Parameters

Status code: 200

Table 4-571 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 4-572 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.

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Table 4-573 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	Cross-border attribute of a global connection bandwidth.
type	String	Type of a global connection bandwidth. • **TrsArea**: cross-geographic-region bandwidth • **Area**: geographic-region bandwidth • **SubArea**: region bandwidth • **Region**: multi-city bandwidth
binding_service	String	Instance type. • **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 capacity is enabled. Standard 95th percentile bandwidth billing is controlled using a whitelist. Value options: • **bwd**: billing by bandwidth capacity • **95**: standard 95th percentile bandwidth billing • **95avr**: average daily 95th percentile bandwidth
size	Integer	The capacity of a global connection bandwidth, in Mbit/s. Value range: 2 Mbit/s to 300 Mbit/s

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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. • **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 the remote access point.
admin_state	String	Global connection bandwidth status. • **NORMAL**: The bandwidth is normal. • **FREEZED**: The bandwidth is frozen.
frozen	Boolean	Whether a global connection bandwidth is frozen. • **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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.
directional_connections	Array of **DirectionalConnection** objects	Directional connections.

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Parameter	Type	Description
enable_share	Boolean	Whether a global connection bandwidth can be used by multiple instances. Range: • **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 4-574 Tag

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

Table 4-575 DirectionalConnection

Parameter	Type	Description
name	String	Instance name.
id	String	Instance ID.
local_site_code	String	Code of the local access point.
remote_site_code	String	Code of the remote access point.

Table 4-576 GlobalConnectionBandwidthAssociatedInstance

Parameter	Type	Description
id	String	Bound instance ID.

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Parameter	Type	Description
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/gcbandwidths
```

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;
```

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```
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)
```

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```
    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.

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Status Codes

Status Code	Description
200	The global connection bandwidth list has been queried.

Error Codes

See **Error Codes**.

4.19.2 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 4-577 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-578 Request header parameters

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

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Table 4-579 Request body parameters

Parameter	Mandatory	Type	Description
globalconnection_bandwidth	Yes	CreateGlobalConnectionBandwidth object	Details about a global connection bandwidth.

Table 4-580 CreateGlobalConnectionBandwidth

Parameter	Mandatory	Type	Description
name	Yes	String	Instance name.
description	No	String	Resource description. Angle brackets (<>) are not allowed.
bordercross	Yes	Boolean	Cross-border attribute of a global connection bandwidth.
type	Yes	String	Type of a global connection bandwidth. • **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.
charge_mode	Yes	String	Billing option. By default, billing by bandwidth capacity is enabled. Standard 95th percentile bandwidth billing is controlled using a whitelist. Value options: • **bwd**: billing by bandwidth capacity • **95**: standard 95th percentile bandwidth billing • **95avr**: average daily 95th percentile bandwidth

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Parameter	Mandatory	Type	Description
size	Yes	Integer	The capacity of a global connection bandwidth, in Mbit/s. Value range: 2 Mbit/s to 300 Mbit/s
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. • **Pt**: Platinum • **Au**: Gold • **Ag**: Silver
local_area	No	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.
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.

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Table 4-581 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	The tag key. The key can contain a maximum of 128 Unicode characters, including letters, digits, hyphens (-), and underscores (_).
value	No	String	The 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 4-582 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
globalconnection_bandwidth	**GlobalConnectionBandwidth** object	Details about a global connection bandwidth.

Table 4-583 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	Cross-border attribute of a global connection bandwidth.

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Parameter	Type	Description
type	String	Type of a global connection bandwidth. • **TrsArea**: cross-geographic-region bandwidth • **Area**: geographic-region bandwidth • **SubArea**: region bandwidth • **Region**: multi-city bandwidth
binding_service	String	Instance type. • **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 capacity is enabled. Standard 95th percentile bandwidth billing is controlled using a whitelist. Value options: • **bwd**: billing by bandwidth capacity • **95**: standard 95th percentile bandwidth billing • **95avr**: average daily 95th percentile bandwidth
size	Integer	The capacity of a global connection bandwidth, in Mbit/s. Value 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. • **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.

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Parameter	Type	Description
remote_area	String	Name of a remote access point. The x-language parameter in the header is used to control the language. The default language is English. **zh-cn** indicates Chinese.
local_site_code	String	Code of the local access point.
remote_site_code	String	Code of the remote access point.
admin_state	String	Global connection bandwidth status. • **NORMAL**: The bandwidth is normal. • **FREEZED**: The bandwidth is frozen.
frozen	Boolean	Whether a global connection bandwidth is frozen. • **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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.
directional_connections	Array of **DirectionalConnection** objects	Directional connections.
enable_share	Boolean	Whether a global connection bandwidth can be used by multiple instances. Range: • **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.

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Table 4-584 Tag

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

Table 4-585 DirectionalConnection

Parameter	Type	Description
name	String	Instance name.
id	String	Instance ID.
local_site_code	String	Code of the local access point.
remote_site_code	String	Code of the remote access point.

Table 4-586 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,
```

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```
    "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;
```

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```
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.v3.model.*;


public class CreateGlobalConnectionBandwidthSolution {

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

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

        CcClient client = CcClient.newBuilder()
                .withCredential(auth)
                .withRegion(CcRegion.valueOf("<YOUR REGION>"))
                .build();
        CreateGlobalConnectionBandwidthRequest request = new CreateGlobalConnectionBandwidthRequest();
        CreateGlobalConnectionBandwidthRequestBody body = new CreateGlobalConnectionBandwidthRequestBody();
        CreateGlobalConnectionBandwidth globalconnectionBandwidthbody = new CreateGlobalConnectionBandwidth();
        globalconnectionBandwidthbody.withSize(5)
            .withName("test_region")
            .withDescription("Description")
            .withChargeMode(CreateGlobalConnectionBandwidth.ChargeModeEnum.fromValue("bwd"))
            .withType(CreateGlobalConnectionBandwidth.TypeEnum.fromValue("Region"))
            .withBordercross(false);
        body.withGlobalconnectionBandwidth(globalconnectionBandwidthbody);
        request.withBody(body);
        try {
            CreateGlobalConnectionBandwidthResponse response = client.createGlobalConnectionBandwidth(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

- Creating a geographic-region bandwidth

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

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

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```
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",
```

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```
            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)
    }
}
```

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- 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.

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Status Codes

Status Code	Description
201	The global connection bandwidth has been created.

Error Codes

See **Error Codes**.

4.19.3 Querying a Global Connection Bandwidth

Function

This API is used to query the details about 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/gcbandwidths/{id}

Table 4-587 Path Parameters

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

Request Parameters

Table 4-588 Request header parameters

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

Response Parameters

Status code: 200

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Table 4-589 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
globalconnection_bandwidth	**GlobalConnectionBandwidth** object	Details about a global connection bandwidth.

Table 4-590 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	Cross-border attribute of a global connection bandwidth.
type	String	Type of a global connection bandwidth. • **TrsArea**: cross-geographic-region bandwidth • **Area**: geographic-region bandwidth • **SubArea**: region bandwidth • **Region**: multi-city bandwidth
binding_service	String	Instance type. • **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.

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Parameter	Type	Description
charge_mode	String	Billing option. By default, billing by bandwidth capacity is enabled. Standard 95th percentile bandwidth billing is controlled using a whitelist. Value options: • **bwd**: billing by bandwidth capacity • **95**: standard 95th percentile bandwidth billing • **95avr**: average daily 95th percentile bandwidth
size	Integer	The capacity of a global connection bandwidth, in Mbit/s. Value 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. • **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 the remote access point.
admin_state	String	Global connection bandwidth status. • **NORMAL**: The bandwidth is normal. • **FREEZED**: The bandwidth is frozen.
frozen	Boolean	Whether a global connection bandwidth is frozen. • **true**: The bandwidth is frozen. • **false**: The bandwidth is not frozen.

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Parameter	Type	Description
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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.
directional_connections	Array of **DirectionalConnection** objects	Directional connections.
enable_share	Boolean	Whether a global connection bandwidth can be used by multiple instances. Range: • **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 4-591 Tag

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

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Table 4-592 DirectionalConnection

Parameter	Type	Description
name	String	Instance name.
id	String	Instance ID.
local_site_code	String	Code of the local access point.
remote_site_code	String	Code of the remote access point.

Table 4-593 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",
```

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```
  "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
```

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```
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 {
```

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```
        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**.

4.19.4 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/gcbandwidths/{id}

Table 4-594 Path Parameters

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

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Request Parameters

Table 4-595 Request header parameters

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

Table 4-596 Request body parameters

Parameter	Mandatory	Type	Description
globalconnection_bandwidth	Yes	**UpdateGlobalConnectionBandwidth** object	Details about a global connection bandwidth.

Table 4-597 UpdateGlobalConnectionBandwidth

Parameter	Mandatory	Type	Description
name	No	String	Instance name.
description	No	String	Resource description. Angle brackets (<>) are not allowed.
size	No	Integer	The capacity of a 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 capacity is enabled. Standard 95th percentile bandwidth billing is controlled using a whitelist. Value options: • **bwd**: billing by bandwidth capacity • **95**: standard 95th percentile bandwidth billing • **95avr**: average daily 95th percentile bandwidth

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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. • **Pt**: Platinum • **Au**: Gold • **Ag**: Silver
binding_service	No	String	Instance type. • **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 4-598 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
globalconnection_bandwidth	**GlobalConnectionBandwidth** object	Details about a global connection bandwidth.

Table 4-599 GlobalConnectionBandwidth

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

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Parameter	Type	Description
domain_id	String	ID of the account that the instance belongs to.
bordercross	Boolean	Cross-border attribute of a global connection bandwidth.
type	String	Type of a global connection bandwidth. • **TrsArea**: cross-geographic-region bandwidth • **Area**: geographic-region bandwidth • **SubArea**: region bandwidth • **Region**: multi-city bandwidth
binding_service	String	Instance type. • **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 capacity is enabled. Standard 95th percentile bandwidth billing is controlled using a whitelist. Value options: • **bwd**: billing by bandwidth capacity • **95**: standard 95th percentile bandwidth billing • **95avr**: average daily 95th percentile bandwidth
size	Integer	The capacity of a global connection bandwidth, in Mbit/s. Value 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. • **Pt**: Platinum • **Au**: Gold • **Ag**: Silver

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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 the remote access point.
admin_state	String	Global connection bandwidth status. • **NORMAL**: The bandwidth is normal. • **FREEZED**: The bandwidth is frozen.
frozen	Boolean	Whether a global connection bandwidth is frozen. • **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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.
directional_connections	Array of **DirectionalConnection** objects	Directional connections.
enable_share	Boolean	Whether a global connection bandwidth can be used by multiple instances. Range: • **true**: The bandwidth can be used by multiple instances. • **false**: The bandwidth cannot be used by multiple instances.

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Parameter	Type	Description
instances	Array of **GlobalConnectionBandwidthAssociatedInstance** objects	The list of instances that the global connection bandwidth is bound to.

Table 4-600 Tag

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

Table 4-601 DirectionalConnection

Parameter	Type	Description
name	String	Instance name.
id	String	Instance ID.
local_site_code	String	Code of the local access point.
remote_site_code	String	Code of the remote access point.

Table 4-602 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.

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Example Requests

Updating a global connection bandwidth

```
PUT https://{cc_endpoint}/v3/{domain_id}/gcb/gcbandwidths/{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.*;
```

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

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```
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,
```

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```
        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**.

4.19.5 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 4-603 Path Parameters

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

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Request Parameters

Table 4-604 Request header parameters

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

Response Parameters

Status code: 204

The global connection bandwidth has been deleted.

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);
```

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```
        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**.

4.19.6 Binding a Global Connection Bandwidth to an Instance

Function

This API is used to bind a global connection bandwidth to an instance.

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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}/associate-instance

Table 4-605 Path Parameters

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

Request Parameters

Table 4-606 Request header parameters

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

Table 4-607 Request body parameters

Parameter	Mandatory	Type	Description
gcbandwidths	Yes	Array of **AssociateGlobalConnectionBandwidthInstanceRequestInfo** objects	Detailed information about the instance that the global connection bandwidth is bound to.

Table 4-608 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.

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Parameter	Mandatory	Type	Description
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 4-609 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 4-610 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. • **success**: The operation is successful. • **fail**: The operation failed.
message	String	Error information when the binding operation fails.

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Example Requests

Binding a global connection bandwidth to an instance

```
POST https://{cc_endpoint}/v3/{domain_id}/gcb/gcbandwidths/{id}/associate-instance

{
  "gcbandwidths" : [ {
    "resource_type" : "GEIP",
    "resource_id" : "37289f8a-8fd2-4eff-a6c4-f3b94bdbb1bc",
    "project_id" : "XXX",
    "region_id" : "global"
  } ]
}
```

Example Responses

Status code: 200

The global connection bandwidth has been bound to the instance.

```
{
  "request_id" : "1b90e4762e3090961a30ca3a712dc0ed",
  "gcbandwidths" : [ {
    "resource_id" : "37289f8a-8fd2-4eff-a6c4-f3b94bdbb1bc",
    "resource_type" : "GEIP",
    "project_id" : "XXX",
    "region_id" : "global",
    "result" : "success",
    "message" : ""
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Binding a global 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");
```

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```
        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()
```

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```
    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{
```

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```
        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**.

4.19.7 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 4-611 Path Parameters

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

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Request Parameters

Table 4-612 Request header parameters

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

Table 4-613 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 4-614 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 4-615 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.

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Parameter	Type	Description
gcbandwidths	Array of DisassociateGlobalConnectionBandwidthInstanceResponseInfo objects	Response to the operation for unbinding a global connection bandwidth from an instance.

Table 4-616 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. • **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/gcbandwidths/{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.

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```
{
  "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")
        );
```

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```
        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)
```

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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.

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Status Codes

Status Code	Description
200	The global connection bandwidth has been unbound from the instance.

Error Codes

See **Error Codes**.

4.19.8 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/gcbandwidths/support-bindings

Table 4-617 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-618 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.

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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. • 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. Additional filtering criteria: The optimal backbone bandwidth type is selected based on **local_area** and **remote_area** for filtering. Restrictions: **local_area** and **remote_area** can or cannot be left blank at the same time, and their site types must be the same.

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Parameter	Mandatory	Type	Description
remote_area	No	String	Remote access point. • 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. Additional filtering criteria: The optimal backbone bandwidth type is selected based on **local_area** and **remote_area** for filtering. Restrictions: **local_area** and **remote_area** can or cannot be left blank at the same time, and their site types must be the same.
binding_service	Yes	String	Instance type used for listing global connection bandwidths. • **Cloud Connect**: cloud connection • **GEIP**: global EIP • **GCN**: central network • **GSN**: site network

Request Parameters

Table 4-619 Request header parameters

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

Response Parameters

Status code: 200

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Table 4-620 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 4-621 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 4-622 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	Cross-border attribute of a global connection bandwidth.
type	String	Type of a global connection bandwidth. • **TrsArea**: cross-geographic-region bandwidth • **Area**: geographic-region bandwidth • **SubArea**: region bandwidth • **Region**: multi-city bandwidth

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Parameter	Type	Description
binding_service	String	Instance type. • **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 capacity is enabled. Standard 95th percentile bandwidth billing is controlled using a whitelist. Value options: • **bwd**: billing by bandwidth capacity • **95**: standard 95th percentile bandwidth billing • **95avr**: average daily 95th percentile bandwidth
size	Integer	The capacity of a global connection bandwidth, in Mbit/s. Value 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. • **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 the remote access point.

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Parameter	Type	Description
admin_state	String	Global connection bandwidth status. • **NORMAL**: The bandwidth is normal. • **FREEZED**: The bandwidth is frozen.
frozen	Boolean	Whether a global connection bandwidth is frozen. • **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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.
directional_connections	Array of **DirectionalConnection** objects	Directional connections.
enable_share	Boolean	Whether a global connection bandwidth can be used by multiple instances. Range: • **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.

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Table 4-623 Tag

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

Table 4-624 DirectionalConnection

Parameter	Type	Description
name	String	Instance name.
id	String	Instance ID.
local_site_code	String	Code of the local access point.
remote_site_code	String	Code of the remote access point.

Table 4-625 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/gcbandwidths/support-bindings?
binding_service=CC&local_area=site-def&remote_area=site-abc
```

Example Responses

Status code: 200

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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)
```

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```
            .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();
            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 = 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"
)
```

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

4.19.9 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.

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URI

GET /v3/{domain_id}/gcb/configs

Table 4-626 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Request Parameters

Table 4-627 Request header parameters

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

Response Parameters

Status code: 200

Table 4-628 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
configs	**ListGlobalConnectionBandwidthConfigs** object	Dynamic configuration items for purchasing a global connection bandwidth.

Table 4-629 ListGlobalConnectionBandwidthConfigs

Parameter	Type	Description
size_range	Array of **GlobalConnectionBandwidthSizeRange** objects	Capacity 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.

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Parameter	Type	Description
ratio_95peak_plus	Integer	Percentage of the minimum bandwidth in enhanced 95th percentile bandwidth billing.
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 capacity.
enable_spec_code	Boolean	Whether multiple line specifications are supported.
ces_enabled	Boolean	Whether to enable Cloud Eye monitoring.

Table 4-630 GlobalConnectionBandwidthSizeRange

Parameter	Type	Description
type	String	Billing option of a global connection bandwidth. Value options: • **bwd**: billing by bandwidth capacity • **95**: standard 95th percentile bandwidth billing • **95avr**: average daily 95th percentile bandwidth
min	Integer	Minimum global connection bandwidth, in Mbit/s.

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Parameter	Type	Description
max	Integer	Maximum global connection bandwidth, in Mbit/s.

Table 4-631 GlobalConnectionBandwidthQuotas

Parameter	Type	Description
quota	Integer	Quotas.
used	Integer	Used quotas.
type	String	Quota type. • **gcb.size**: global connection bandwidth capacity • **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" ]
  }
}
```

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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__":
```

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

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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**.

4.19.10 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 4-632 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

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Table 4-633 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.
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 strings	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. • **Pt**: Platinum • **Au**: Gold • **Ag**: Silver

Request Parameters

Table 4-634 Request header parameters

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

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Response Parameters

Status code: 200

Table 4-635 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 4-636 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 4-637 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.

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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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.
name_zh	String	Line specification in Chinese.
name_en	String	Line specification in English.
level	String	Line grade. • **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" : [ {
```

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```
    "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());
```

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```
            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()
```

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```
    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**.

4.19.11 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 4-638 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

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Table 4-639 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.
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 strings	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. • **Area**: a geographic region site • **SubArea**: a region site • **Region**: a multi-city site

Request Parameters

Table 4-640 Request header parameters

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

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Response Parameters

Status code: 200

Table 4-641 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 4-642 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 4-643 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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* format.
region_id	String	Region ID.
name_en	String	User-defined site name in English. Value range: 1 to 255 characters
name_cn	String	User-defined site name in Chinese. Value range: 1 to 64 characters

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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. The value can be: • **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.
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 4-644 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 Chinese. Value range: 1 to 255 characters
name_cn	String	User-defined site group name in Chinese. Value range: 1 to 64 characters

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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.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 = 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
```

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```
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**.

4.19.12 Querying the Line Grade List

Function

This API is used to query the line grade list.

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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 4-645 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-646 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.
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 strings	Resource ID. Multiple IDs can be queried.
local_area	No	String	Local access point code included in the line specification.

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Parameter	Mandatory	Type	Description
remote_area	No	String	Remote access point code included in the line specification.
levels	No	Array of strings	Bandwidth class. • **Pt**: Platinum • **Ag**: Silver

Request Parameters

Table 4-647 Request header parameters

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

Response Parameters

Status code: 200

Table 4-648 Response body parameters

Parameter	Type	Description
request_id	String	Request ID.
page_info	**PageInfo** object	Pagination query information.
line_levels	Array of **GlobalConnectionBandwidthLineLevel** objects	Response body for querying the line grade list.

Table 4-649 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.

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Table 4-650 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 UTC time is in the *yyyy-MM-ddTHH:mm:ss* format.
updated_at	String	Time when the resource was updated. The UTC time must be in the *yyyy-MM-ddTHH:mm:ss* 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.

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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
```

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```
    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.

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Status Codes

Status Code	Description
200	The line grade list has been queried.

Error Codes

See **Error Codes**.

4.20 Global Connection Bandwidth Tag Management

4.20.1 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 4-651 Path Parameters

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Unique identifier of a resource.

Request Parameters

Table 4-652 Request header parameters

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

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Response Parameters

Status code: 200

Table 4-653 Response body parameters

Parameter	Type	Description
tags	Array of **Tag** objects	Tag list.
request_id	String	Request ID.

Table 4-654 Tag

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

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```
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 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)
```

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```
    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.

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Status Codes

Status Code	Description
200	The global connection bandwidth tag has been queried.

Error Codes

See **Error Codes**.

4.20.2 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 4-655 Path Parameters

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Unique identifier of a resource.

Request Parameters

Table 4-656 Request header parameters

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

Table 4-657 Request body parameters

Parameter	Mandatory	Type	Description
tag	Yes	**RequiredTag** object	Resource tag, which is a key-value pair.

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Table 4-658 RequiredTag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key.
value	Yes	String	Tag value.

Response Parameters

Status code: 204

The global connection bandwidth tag has been added.

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.cc.v3.region.CcRegion;
import com.huaweicloud.sdk.cc.v3.*;
import com.huaweicloud.sdk.cc.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
```

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```
this example, set environment variables CLOUD_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 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 = CreateGcbResourceTagRequest()
        request.resource_id = "{resource_id}"
        tagbody = RequiredTag(
```

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```
            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)
    }
}
```

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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**.

4.20.3 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 4-659 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 4-660 Request header parameters

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

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Response Parameters

Status code: 204

The global connection bandwidth tag has been deleted.

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) {
```

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```
            e.printStackTrace();
        } catch (ServiceResponseException 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")
```

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```
    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**.

4.20.4 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

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Table 4-661 Path Parameters

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Unique identifier of a resource.

Request Parameters

Table 4-662 Request header parameters

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

Table 4-663 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of **RequiredTag** objects	Resource tags to be added or deleted.

Table 4-664 RequiredTag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key.
value	Yes	String	Tag value.

Response Parameters

Status code: 204

The global connection bandwidth tags have been added.

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",
```

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```
    "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 {
```

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```
            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)
```

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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.

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Status Codes

Status Code	Description
204	The global connection bandwidth tags have been added.

Error Codes

See **Error Codes**.

4.20.5 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 4-665 Path Parameters

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Unique identifier of a resource.

Request Parameters

Table 4-666 Request header parameters

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

Table 4-667 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of **RequiredTag** objects	Resource tags to be added or deleted.

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Table 4-668 RequiredTag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key.
value	Yes	String	Tag value.

Response Parameters

Status code: 204

The global connection bandwidth tags have been deleted.

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 {
```

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

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```
    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}"
```

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```
    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**.

4.20.6 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

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Request Parameters

Table 4-669 Request header parameters

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

Table 4-670 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.

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Parameter	Mandatory	Type	Description
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.
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.

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Parameter	Mandatory	Type	Description
not_tags_any	No	Array of **QueryTag** objects	The instances to be queried do not contain all tags listed in **not_tags_any**. Each instance to be queried contains a maximum of 20 keys. Each tag key has a maximum of 10 tag values. The tag value corresponding to each tag key can be an empty array but the structure cannot be missing. 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 4-671 QueryTag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key.
values	Yes	Array of strings	List of tag values.

Table 4-672 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.

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Response Parameters

Status code: 200

Table 4-673 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

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```
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<>();
```

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```
        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 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 = CountGcbResourceByTagRequest()
        listMatchesbody = [
            TmsMatch(
                key="resource_name",
                value="resource1"
            )
        ]
        listValuesNotTagsAny = [
            "value1",
```

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```
            "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,
```

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```
        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**.

4.20.7 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 4-674 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records to be queried.
offset	No	Integer	Index offset.

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Request Parameters

Table 4-675 Request header parameters

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

Table 4-676 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.

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Parameter	Mandatory	Type	Description
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.
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.

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Parameter	Mandatory	Type	Description
not_tags_any	No	Array of **QueryTag** objects	The instances to be queried do not contain all tags listed in **not_tags_any**. Each instance to be queried contains a maximum of 20 keys. Each tag key has a maximum of 10 tag values. The tag value corresponding to each tag key can be an empty array but the structure cannot be missing. 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 4-677 QueryTag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key.
values	Yes	Array of strings	List of tag values.

Table 4-678 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.

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Response Parameters

Status code: 200

Table 4-679 Response body parameters

Parameter	Type	Description
resources	Array of **TmsResource** objects	Resource list.
total_count	Integer	Total records.
request_id	String	Request ID.

Table 4-680 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 4-681 Tag

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

{
```

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```
 "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) {
```

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

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```
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException 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 = [
            TmsMatch(
                key="resource_name",
                value="resource1"
            )
        ]
        listValuesNotTagsAny = [
            "value1",
            "value2"
        ]
        listNotTagsAnybody = [
            QueryTag(
                key="key1",
                values=listValuesNotTagsAny
            )
        ]
        listValuesNotTags = [
            "value1",
            "value2"
        ]
        listNotTagsbody = [
            QueryTag(
                key="key1",
                values=listValuesNotTags
            )
```

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```
        ]
        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())
```

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```
    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.

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Status Codes

Status Code	Description
200	The list of global connection bandwidths in an account has been queried.

Error Codes

See **Error Codes**.

4.20.8 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 4-682 Request header parameters

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

Response Parameters

Status code: 200

Table 4-683 Response body parameters

Parameter	Type	Description
tags	Array of **TmsTagValues** objects	Tag list.

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Parameter	Type	Description
total_count	Integer	Total records.
request_id	String	Request ID.

Table 4-684 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
```

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```
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_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 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 = 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)
```

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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**.

4.21 Cloud Connection Routes

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4.21.1 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 4-685 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.

Table 4-686 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records returned on each page. The value ranges from 1 to 2000.
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.

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Parameter	Mandatory	Type	Description
cloud_connection_id	No	Array of strings	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 4-687 Request header parameters

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

Response Parameters

Status code: 200

Table 4-688 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 4-689 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.

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Table 4-690 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.
destination	String	Destination.
type	String	Type of the network instance that the next hop of a route points to. • **VPC**: a VPC • **VGW**: a virtual gateway

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.

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

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```
    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.

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Status Codes

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

Error Codes

See **Error Codes**.

4.21.2 Querying a Cloud Connection Route

Function

This API is used to query the details about 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 4-691 Path Parameters

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

Request Parameters

Table 4-692 Request header parameters

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

Response Parameters

Status code: 200

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Table 4-693 Response body parameters

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

Table 4-694 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.
destination	String	Destination.
type	String	Type of the network instance that the next hop of a route points to. • **VPC**: a VPC • **VGW**: a virtual gateway

Example Requests

Querying the details about a cloud connection route

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

Example Responses

Status code: 200

The details about 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",
```

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```
    "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
```

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```
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 {
```

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```
        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 about a cloud connection route have been queried.

Error Codes

See **Error Codes**.

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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	• 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.

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Authorization Model	Authorization Using	Permissions	Authorization Method	Scenario
Identity policy	User-policy	• System-defined identity policies • Custom identity policies	• 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

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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

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- **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

Permission	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	-	√	√

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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	-	√	√

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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	-	√	×

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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	-	√	×

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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:centralNetwork:create	-	√	√
Updating a central network	PUT /v3/{domain_id}/gcn/central-networks/{central_network_id}	cc:centralNetwork:update	-	√	√
Deleting a central network	DELETE /v3/{domain_id}/gcn/central-networks/{central_network_id}	cc:centralNetwork:delete	-	√	√
Querying central network details	GET /v3/{domain_id}/gcn/central-networks/{central_network_id}	cc:centralNetwork:get	-	√	√
Querying the central network list	GET /v3/{domain_id}/gcn/central-networks	cc:centralNetwork:list	-	√	√

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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	-	√	√

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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	-	√	√

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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	-	√	√

5.3 Actions Supported by Identity Policy-based Authorization

IAM provides system-defined identity policies to define typical cloud service permissions. You can also create custom identity policies using the actions supported by cloud services for more refined access control.

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In addition to IAM, the **Organizations** service also provides **Service Control Policies (SCPs)** to set access control policies.

SCPs do not actually grant any permissions to an entity. They only set the permissions boundary for the entity. When SCPs are attached to an organizational unit (OU) or a member account, the SCPs do not directly grant permissions to that OU or member account. Instead, the SCPs only determine what permissions are available for that member account or those member accounts under that OU. The granted permissions can be applied only if they are allowed by the SCPs.

To learn more about how IAM is different from Organizations for access control, see **How IAM Is Different from Organizations for Access Control?**.

This section describes the elements used by IAM custom identity policies and Organizations SCPs. The elements include actions, resources, and conditions.

- For details about how to use these elements to edit an IAM custom identity policy, see **Creating a Custom Identity Policy**.
- For details about how to use these elements to edit a custom SCP, see **Creating an SCP**.

Actions

Actions are specific operations that are allowed or denied in an identity policy.

- The Access Level column describes how the action is classified (List, Read, or Write). This classification helps you understand the level of access that an action grants when you use it in an identity policy.
- The Resource Type column indicates whether the action supports resource-level permissions.
  - You can use a wildcard (*) to indicate all resource types. If this column is empty (-), the action does not support resource-level permissions and you must specify all resources ("*") in your identity policy statements.
  - If this column includes a resource type, you must specify the URN in the Resource element of your identity policy statements.
  - Required resources are marked with asterisks (*) in the table. If you specify a resource in a statement using this action, then it must be of this type.

  For details about the resource types defined by CC, see **Resources**.
- The Condition Key column contains keys that you can specify in the Condition element of an identity policy statement.
  - If the Resource Type column has values for an action, the condition key takes effect only for the listed resource types.
  - If the Resource Type column is empty (-) for an action, the condition key takes effect for all resources that action supports.
  - If the Condition Key column is empty (-) for an action, the action does not support any condition keys.

  For details about the condition keys defined by CC, see **Conditions**.
- The Alias column lists the policy actions that are configured in identity policies. With these actions, you can use APIs for policy-based authorization. For details, see **Policies and Identity Policies**.

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The following table lists the actions that you can define in identity policy statements for CC.

Table 5-11 Actions supported by CC

Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
cc:cloudConnections:create	Grants permission to create a cloud connection.	Write	cloudConnection *	-	-
			-	• g:EnterpriseProjectId • g:RequestTag/<tag-key> • g:TagKeys	
cc:cloudConnections:delete	Grants permission to delete a cloud connection.	Write	cloudConnection *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key>	-
cc:cloudConnections:update	Grants permission to update a cloud connection.	Write	cloudConnection *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key>	-
cc:cloudConnections:get	Grants permission to query the details of a cloud connection.	Read	cloudConnection *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key>	-
cc:cloudConnections:list	Grants permission to query the cloud connections.	List	cloudConnection *	-	-

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Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
cc:cloudConnections:tag	Grants permission to add tags to a cloud connection.	Tagging	cloudConnection *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key>	-
			-	• g:RequestTag/<tag-key> • g:TagKeys	
cc:cloudConnections:unTag	Grants permission to delete tags from a cloud connection.	Tagging	cloudConnection *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key>	-
			-	• g:RequestTag/<tag-key> • g:TagKeys	
cc:cloudConnections:listTags	Grants permission to query the tags added to a cloud connection.	List	cloudConnection *	-	-
cc:networkInstances:create	Grants permission to create a network instance.	Write	networkInstance *	-	-
			cloudConnection *	g:ResourceTag/<tag-key>	

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Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
			-	• g:EnterpriseProjectId • cc:VpcId • cc:VirtualGatewayId • cc:EnterpriseRouterId	
cc:networkInstances:delete	Grants permission to remove a network instance.	Write	networkInstance *	• cc:VpcId • cc:VirtualGatewayId • cc:EnterpriseRouterId	-
			cloudConnection *	g:ResourceTag/<tag-key>	
			-	g:EnterpriseProjectId	
cc:networkInstances:update	Grants permission to update a network instance.	Write	networkInstance *	• cc:VpcId • cc:VirtualGatewayId • cc:EnterpriseRouterId	-
			cloudConnection *	g:ResourceTag/<tag-key>	
			-	g:EnterpriseProjectId	
cc:networkInstances:get	Grants permission to query the details of a network instance.	Read	networkInstance *	-	-
			cloudConnection *	g:ResourceTag/<tag-key>	

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Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
			-	g:EnterpriseProjectId	
cc:networkInstances:list	Grants permission to query the network instances.	List	networkInstance *	-	-
cc:bandwidthPackages:create	Grants permission to create a bandwidth package.	Write	bandwidthPackage *	-	-
			-	• g:EnterpriseProjectId • g:RequestTag/<tag-key> • g:TagKeys	
cc:bandwidthPackages:delete	Grants permission to delete a bandwidth package.	Write	bandwidthPackage *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key>	-
cc:bandwidthPackages:update	Grants permission to update a bandwidth package.	Write	bandwidthPackage *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key>	-
cc:bandwidthPackages:get	Grants permission to query the details of a bandwidth package.	Read	bandwidthPackage *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key>	-

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Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
cc:bandwidthPackages:list	Grants permission to query the bandwidth packages.	List	bandwidthPackage *	-	-
cc:bandwidthPackages:tag	Grants permission to add tags to a bandwidth package.	Tagging	bandwidthPackage *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key>	-
			-	• g:RequestTag/<tag-key> • g:TagKeys	
cc:bandwidthPackages:unTag	Grants permission to delete tags from a bandwidth package.	Tagging	bandwidthPackage *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key>	-
			-	• g:RequestTag/<tag-key> • g:TagKeys	
cc:bandwidthPackages:listTags	Grants permission to query the tags added to a bandwidth package.	List	bandwidthPackage *	-	-
cc:bandwidthPackages:associate	Grants permission to bind a bandwidth package to a cloud connection.	Write	bandwidthPackage *	g:ResourceTag/<tag-key>	-
			cloudConnection *	g:ResourceTag/<tag-key>	

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Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
			-	g:EnterpriseProjectId	
cc:bandwidthPackages:disassociate	Grants permission to unbind a bandwidth package from a cloud connection.	Write	bandwidthPackage *	g:ResourceTag/<tag-key>	-
			cloudConnection *	g:ResourceTag/<tag-key>	
			-	g:EnterpriseProjectId	
cc:interRegionBandwidths:create	Grants permission to assign an inter-region bandwidth.	Write	interRegionBandwidth *	-	-
			cloudConnection *	g:ResourceTag/<tag-key>	
			-	• g:EnterpriseProjectId • cc:BandwidthPackageId	
cc:interRegionBandwidths:delete	Grants permission to delete an inter-region bandwidth.	Write	interRegionBandwidth *	cc:BandwidthPackageId	-
			cloudConnection *	g:ResourceTag/<tag-key>	
			-	g:EnterpriseProjectId	

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Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
cc:interRegionBandwidths:update	Grants permission to modify an inter-region bandwidth.	Write	interRegionBandwidth *	cc:BandwidthPackageId	-
			cloudConnection *	g:ResourceTag/<tag-key>	
			-	g:EnterpriseProjectId	
cc:interRegionBandwidths:get	Grants permission to query the details of an inter-region bandwidth.	Read	interRegionBandwidth *	-	-
			cloudConnection *	g:ResourceTag/<tag-key>	
			-	g:EnterpriseProjectId	
cc:interRegionBandwidths:list	Grants permission to query the inter-region bandwidths.	List	interRegionBandwidth *	-	-
cc:cloudConnectionRoutes:get	Grants permission to query the details of a cloud connection route.	Read	-	-	-
cc:cloudConnectionRoutes:list	Grants permission to query the cloud connection routes.	List	-	-	-

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Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
cc:authorisation:create	Grants permission to allow other accounts to load the VPCs in your account to their cloud connections.	Write	-	-	-
cc:authorisation:delete	Grants permission to stop allowing other accounts to load the VPCs in your account to their cloud connections.	Write	-	-	-
cc:authorisation:update	Grants permission to update the authorization that allows other accounts to load the VPCs in your account to their cloud connections.	Write	-	-	-
cc:authorisation:list	Grants permission to query the VPCs that are allowed to be loaded to the cloud connections in other accounts.	List	-	-	-

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Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
cc:authorisation:listPermissions	Grants permission to query the VPCs that other accounts allow you to load to your cloud connection.	List	-	-	-
cc:crossBorderConsent:show	Grants permission to query the explicit consent for cross-border transfer of personal data.	Read	-	-	-
cc:crossBorderConsent:create	Grants permission to allow users to express explicit consent for cross-border transfer of personal data.	Write	-	-	-
cc:quota:list	Grants permission to query the quotas.	List	-	-	-
cc:capability:list	Grants permission to query the capabilities of a cloud connection, central network, and site network.	List	-	-	-

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Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
cc:centralNetwork:create	Grants permission to create a central network.	Write	centralNetwork *	-	-
			-	• g:EnterpriseProjectId • g:RequestTag/<tag-key> • g:TagKeys • cc:MultipleEnterpriseRouterIds	
cc:centralNetwork:delete	Grants permission to delete a central network.	Write	centralNetwork *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key>	-
cc:centralNetwork:update	Grants permission to update a central network.	Write	centralNetwork *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key>	-
			-	• g:RequestTag/<tag-key> • g:TagKeys	
cc:centralNetwork:get	Grants permission to query the details of a central network.	Read	centralNetwork *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key>	-

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Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
cc:centralNetwork:list	Grants permission to query the central networks.	List	centralNetwork *	-	-
cc:centralNetwork:tag	Grants permission to add tags to a central network.	Tagging	centralNetwork *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key>	-
			-	• g:RequestTag/<tag-key> • g:TagKeys	
cc:centralNetwork:unTag	Grants permission to delete tags from a central network.	Tagging	centralNetwork *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key>	-
			-	• g:RequestTag/<tag-key> • g:TagKeys	
cc:centralNetwork:listTags	Grants permission to query the tags added to a central network.	List	centralNetwork *	-	-
cc:centralNetwork:createPolicy	Grants permission to add a policy to a central network.	Write	centralNetwork *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key>	-

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Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
			-	cc:MultipleEnterpriseRouterIds	
cc:centralNetwork:applyPolicy	Grants permission to apply a policy to a central network.	Write	centralNetwork *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key>	-
cc:centralNetwork:deletePolicy	Grants permission to delete a policy from a central network.	Write	centralNetwork *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key>	-
cc:centralNetwork:listPolicies	Grants permission to query the central network policies.	List	centralNetwork *	-	-
cc:centralNetwork:listChangeSet	Grants permission to query the changes between the current policy and an applied policy.	List	centralNetwork *	-	-
cc:centralNetwork:listConnections	Grants permission to query the central network connections.	List	centralNetwork *	-	-

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Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
cc:centralNetwork:updateConnection	Grants permission to update a central network connection.	Write	centralNetwork *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key>	-
			-	cc:GlobalConnectionBandwidthId	
cc:centralNetworkAttachment:createGdgw	Grants permission to add a global DC gateway to a central network as an attachment.	Write	centralNetwork Attachment *	-	-
			centralNetwork *	g:ResourceTag/<tag-key>	
			-	• g:EnterpriseProjectId • cc:EnterpriseRouterId • cc:GlobalDcGatewayId	
cc:centralNetworkAttachment:updateGdgw	Grants permission to update a global DC gateway on a central network.	Write	centralNetwork Attachment *	• cc:GlobalDcGatewayId • cc:EnterpriseRouterId	-
			centralNetwork *	g:ResourceTag/<tag-key>	
			-	g:EnterpriseProjectId	

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Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
cc:centralNetworkAttachment:getGdgw	Grants permission to query the details of a global DC gateway on a central network.	Read	centralNetworkAttachment *	• cc:GlobalDcGatewayId • cc:EnterpriseRouterId	-
			centralNetwork *	g:ResourceTag/<tag-key>	
			-	g:EnterpriseProjectId	
cc:centralNetworkAttachment:listGdgws	Grants permission to query the global DC gateways on a central network.	List	centralNetworkAttachment *	-	-
			centralNetwork *	g:ResourceTag/<tag-key>	
			-	g:EnterpriseProjectId	
cc:centralNetworkAttachment:createErRouteTable	Grants permission to add an enterprise router route table to a central network as an attachment.	Write	centralNetworkAttachment *	-	-
			centralNetwork *	g:ResourceTag/<tag-key>	
			-	• g:EnterpriseProjectId • cc:MultipleEnterpriseRouterIds	

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Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
cc:centralNetworkAttachment:updateErRouteTable	Grants permission to update an enterprise router route table on a central network.	Write	centralNetworkAttachment *	cc:MultipleEnterpriseRouterIds	-
			centralNetwork *	g:ResourceTag/<tag-key>	
			-	g:EnterpriseProjectId	
cc:centralNetworkAttachment:getErRouteTable	Grants permission to query the details of an enterprise router route table on a central network.	Read	centralNetworkAttachment *	cc:MultipleEnterpriseRouterIds	-
			centralNetwork *	g:ResourceTag/<tag-key>	
			-	g:EnterpriseProjectId	
cc:centralNetworkAttachment:listErRouteTables	Grants permission to query the enterprise router route tables on a central network.	List	centralNetworkAttachment *	-	-
			centralNetwork *	g:ResourceTag/<tag-key>	
			-	g:EnterpriseProjectId	

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Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
cc:centralNetworkAttachment:delete	Grants permission to delete an attachment from a central network.	Write	centralNetworkAttachment *	• cc:GlobalDcGatewayId • cc:EnterpriseRouterId • cc:MultipleEnterpriseRouterIds	-
			centralNetwork *	g:ResourceTag/<tag-key>	
			-	g:EnterpriseProjectId	
cc:centralNetworkAttachment:list	Grants permission to query the central network attachments.	List	centralNetworkAttachment *	-	-
			centralNetwork *	g:ResourceTag/<tag-key>	
			-	g:EnterpriseProjectId	
cc:siteNetwork:createP2P	Grants permission to create a P2P site network.	Write	siteNetwork *	-	-
cc:siteNetwork:list	Grants permission to query the site networks.	List	siteNetwork *	-	-
cc:siteNetwork:get	Grants permission to query the details of a site network.	Read	siteNetwork *	-	-

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Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
cc:siteNetwork:update	Grants permission to update a site network.	Write	siteNetwork *	-	-
cc:siteNetwork:delete	Grants permission to delete a site network.	Write	siteNetwork *	-	-
cc:siteNetwork:disassociateBandwidth	Grants permission to unbind a site network bandwidth.	Write	siteNetwork *	-	-
cc:siteNetwork:associateBandwidth	Grants permission to bind a site network bandwidth.	Write	siteNetwork *	-	-
cc:siteNetwork:updateBandwidthSize	Grants permission to modify the site network bandwidth size.	Write	siteNetwork *	-	-
cc:siteNetwork:updateBandwidth	Grants permission to change the site network bandwidth.	Write	siteNetwork *	-	-
cc:gcbandwidth:list	Grants permission to query global connection bandwidths.	List	gcbandwidth *	-	• cc:gcbandwidths:list
			-	**g:EnterpriseProjectId**	

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Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
cc:gcbandwidth:get	Grants permission to query the details of a global connection bandwidth.	Read	gcbandwidth *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key>	• cc:gcbandwidths:get
cc:gcbandwidth:create	Grants permission to create a global connection bandwidth.	Write	gcbandwidth *	-	• cc:gcbandwidths:create
			-	• g:EnterpriseProjectId • g:RequestTag/<tag-key> • g:TagKeys	
cc:gcbandwidth:update	Grants permission to update a global connection bandwidth.	Write	gcbandwidth *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key>	• cc:gcbandwidths:update
cc:gcbandwidth:delete	Grants permission to delete a global connection bandwidth.	Write	gcbandwidth *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key>	• cc:gcbandwidths:delete
cc:gcbandwidth:getRelations	Grants permission to query global connection bandwidth binding relations.	Read	gcbandwidth *	g:EnterpriseProjectId	• cc:gcbandwidths:get

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Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
cc:gcbandwidth:associateInstance	Grants permission to bind a global connection bandwidth to an instance.	Write	gcbandwidth *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key>	• cc:gcbandwidths:update
			-	cc:gcbAssociateResourceType	
cc:gcbandwidth:disassociateInstance	Grants permission to unbind a global connection bandwidth from an instance.	Write	gcbandwidth *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key> • cc:gcbAssociateResourceType	• cc:gcbandwidths:update
cc:gcbandwidth:listSupportBinding	Grants permission to query global connection bandwidths that can be bound to instances.	List	gcbandwidth *	-	• cc:gcbandwidths:list
			-	g:EnterpriseProjectId	
cc:gcbandwidth:listTags	Grants permission to query tags of a global connection bandwidth.	List	gcbandwidth *	-	• cc:gcbandwidths:listByTag • cc:gcbandwidths:countByTag • cc:gcbandwidths:getTags

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Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
cc:gcbandwidth:tag	Grants permission to add tags to a global connection bandwidth.	Tagging	gcbandwidth *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key>	• cc:gcbandwidths:createTags
			-	• g:RequestTag/<tag-key> • g:TagKeys	
cc:gcbandwidth:unTag	Grants permission to delete tags from a global connection bandwidth.	Tagging	gcbandwidth *	• g:EnterpriseProjectId • g:ResourceTag/<tag-key>	• cc:gcbandwidths:deleteTags
			-	g:TagKeys	

Each API of CC usually supports one or more actions. **Table 5-12** lists the supported actions and dependencies.

Table 5-12 Actions and dependencies supported by CC APIs

API	Action	Dependencies
POST /v3/{domain_id}/ccaas/cloud-connections	cc:cloudConnections:create	-
PUT /v3/{domain_id}/ccaas/cloud-connections/{id}	cc:cloudConnections:update	-
DELETE /v3/{domain_id}/ccaas/cloud-connections/{id}	cc:cloudConnections:delete	-

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API	Action	Dependencies
GET /v3/{domain_id}/ccaas/cloud-connections/{id}	cc:cloudConnections:get	-
GET /v3/{domain_id}/ccaas/cloud-connections	cc:cloudConnections:list	-
POST /v3/{domain_id}/ccaas/cloud-connections/filter	cc:cloudConnections:list	-
POST /v3/{domain_id}/ccaas/cloud-connections/{id}/tag	cc:cloudConnections:tag	-
POST /v3/{domain_id}/ccaas/cloud-connections/{id}/untag	cc:cloudConnections:unTag	-
GET /v3/{domain_id}/ccaas/cloud-connections/tags	cc:cloudConnections:listTags	-
POST /v3/{domain_id}/ccaas/network-instances	cc:networkInstances:create	-
PUT /v3/{domain_id}/ccaas/network-instances/{id}	cc:networkInstances:update	-
DELETE /v3/{domain_id}/ccaas/network-instances/{id}	cc:networkInstances:delete	-
GET /v3/{domain_id}/ccaas/network-instances/{id}	cc:networkInstances:get	-
GET /v3/{domain_id}/ccaas/network-instances	cc:networkInstances:list	-

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API	Action	Dependencies
POST /v3/{domain_id}/ccaas/bandwidth-packages	cc:bandwidthPackages:create	-
PUT /v3/{domain_id}/ccaas/bandwidth-packages/{id}	cc:bandwidthPackages:update	-
DELETE /v3/{domain_id}/ccaas/bandwidth-packages/{id}	cc:bandwidthPackages:delete	-
GET /v3/{domain_id}/ccaas/bandwidth-packages/{id}	cc:bandwidthPackages:get	-
GET /v3/{domain_id}/ccaas/bandwidth-packages	cc:bandwidthPackages:list	-
POST /v3/{domain_id}/ccaas/bandwidth-packages/filter	cc:bandwidthPackages:list	-
POST /v3/{domain_id}/ccaas/bandwidth-packages/{id}/tag	cc:bandwidthPackages:tag	-
POST /v3/{domain_id}/ccaas/bandwidth-packages/{id}/untag	cc:bandwidthPackages:unTag	-
GET /v3/{domain_id}/ccaas/bandwidth-packages/tags	cc:bandwidthPackages:listTags	-
POST /v3/{domain_id}/ccaas/bandwidth-packages/{id}/associate	cc:bandwidthPackages:associate	-

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API	Action	Dependencies
POST /v3/{domain_id}/ccaas/bandwidth-packages/{id}/disassociate	cc:bandwidthPackages:disassociate	-
POST /v3/{domain_id}/ccaas/inter-region-bandwidths	cc:interRegionBandwidths:create	-
PUT /v3/{domain_id}/ccaas/inter-region-bandwidths/{id}	cc:interRegionBandwidths:update	-
DELETE /v3/{domain_id}/ccaas/inter-region-bandwidths/{id}	cc:interRegionBandwidths:delete	-
GET /v3/{domain_id}/ccaas/inter-region-bandwidths/{id}	cc:interRegionBandwidths:get	-
GET /v3/{domain_id}/ccaas/inter-region-bandwidths	cc:interRegionBandwidths:list	-
GET /v3/{domain_id}/ccaas/cloud-connection-routes/{id}	cc:cloudConnectionRoutes:get	-
GET /v3/{domain_id}/ccaas/cloud-connection-routes	cc:cloudConnectionRoutes:list	-
POST /v3/{domain_id}/ccaas/authorisations	cc:authorisation:create	-
DELETE /v3/{domain_id}/ccaas/authorisations/{id}	cc:authorisation:delete	-
PUT /v3/{domain_id}/ccaas/authorisations/{id}	cc:authorisation:update	-

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API	Action	Dependencies
GET /v3/{domain_id}/ccaas/authorisations	cc:authorisation:list	-
GET /v3/{domain_id}/ccaas/permissions	cc:authorisation:listPermissions	-
GET /v3/{domain_id}/ccaas/quotas	cc:quota:list	-
GET /v3/{domain_id}/gcn/quotas	cc:quota:list	-
GET /v3/{domain_id}/ccaas/capabilities	cc:capability:list	-
GET /v3/{domain_id}/gcn/capabilities	cc:capability:list	-
POST /v3/{domain_id}/gcn/central-networks	cc:centralNetwork:create	• er:instances:get • er:routeTables:get • er:routeTables:listPropagations • er:routeTables:enablePropagation • er:routeTables:disablePropagation • er:routeTables:listAssociations • er:routeTables:associate • er:routeTables:disassociate

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API	Action	Dependencies
DELETE /v3/{domain_id}/gcn/central-networks/{central_network_id}	cc:centralNetwork:delete	• er:instances:get • er:routeTables:get • er:routeTables:listPropagations • er:routeTables:enablePropagation • er:routeTables:disablePropagation • er:routeTables:listAssociations • er:routeTables:associate • er:routeTables:disassociate
PUT /v3/{domain_id}/gcn/central-networks/{central_network_id}	cc:centralNetwork:update	-
GET /v3/{domain_id}/gcn/central-networks/{central_network_id}	cc:centralNetwork:get	-
GET /v3/{domain_id}/gcn/central-networks	cc:centralNetwork:list	-
POST /v3/{domain_id}/gcn/central-networks/filter	cc:centralNetwork:list	-
POST /v3/{domain_id}/gcn/central-networks/{central_network_id}/tag	cc:centralNetwork:tag	-
POST /v3/{domain_id}/gcn/central-networks/{central_network_id}/untag	cc:centralNetwork:unTag	-

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API	Action	Dependencies
GET /v3/{domain_id}/gcn/central-networks/tags	cc:centralNetwork:listTags	-
POST /v3/{domain_id}/gcn/central-network/{central_network_id}/policies	cc:centralNetwork:createPolicy	• er:instances:get • er:routeTables:get
POST /v3/{domain_id}/gcn/central-network/{central_network_id}/policies/{policy_id}/apply	cc:centralNetwork:applyPolicy	• er:instances:get • er:routeTables:get • er:routeTables:listPropagations • er:routeTables:enablePropagation • er:routeTables:disablePropagation • er:routeTables:listAssociations • er:routeTables:associate • er:routeTables:disassociate
DELETE /v3/{domain_id}/gcn/central-network/{central_network_id}/policies/{policy_id}	cc:centralNetwork:deletePolicy	-
GET /v3/{domain_id}/gcn/central-network/{central_network_id}/policies	cc:centralNetwork:listPolicies	-
GET /v3/{domain_id}/gcn/central-network/{central_network_id}/policies/{policy_id}/change-set	cc:centralNetwork:listChangeSet	-

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API	Action	Dependencies
GET /v3/{domain_id}/gcn/central-network/{central_network_id}/connections	cc:centralNetwork:listConnections	-
PUT /v3/{domain_id}/gcn/central-network/{central_network_id}/connections/{connection_id}	cc:centralNetwork:updateConnection	-
POST /v3/{domain_id}/gcn/central-network/{central_network_id}/gdgw-attachments	cc:centralNetworkAttachment:createGdgw	• er:instances:get • er:routeTables:get • er:routeTables:listPropagations • er:routeTables:enablePropagation • er:routeTables:disablePropagation • er:routeTables:listAssociations • er:routeTables:associate • er:routeTables:disassociate
PUT /v3/{domain_id}/gcn/central-network/{central_network_id}/gdgw-attachments/{gdgw_attachment_id}	cc:centralNetworkAttachment:updateGdgw	-
GET /v3/{domain_id}/gcn/central-network/{central_network_id}/gdgw-attachments/{gdgw_attachment_id}	cc:centralNetworkAttachment:getGdgw	-

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API	Action	Dependencies
GET /v3/{domain_id}/gcn/central-network/{central_network_id}/gdgw-attachments	cc:centralNetworkAttachment:listGdgws	-
POST /v3/{domain_id}/gcn/central-network/{central_network_id}/er-route-table-attachments	cc:centralNetworkAttachment:createErRouteTable	• er:instances:get • er:routeTables:get • er:routeTables:listPropagations • er:routeTables:enablePropagation • er:routeTables:disablePropagation • er:routeTables:listAssociations • er:routeTables:associate • er:routeTables:disassociate
PUT /v3/{domain_id}/gcn/central-network/{central_network_id}/er-route-table-attachments/{er_route_table_attachment_id}	cc:centralNetworkAttachment:updateErRouteTable	-
GET /v3/{domain_id}/gcn/central-network/{central_network_id}/er-route-table-attachments/{er_route_table_attachment_id}	cc:centralNetworkAttachment:getErRouteTable	-
GET /v3/{domain_id}/gcn/central-network/{central_network_id}/er-route-table-attachments	cc:centralNetworkAttachment:listErRouteTables	-

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API	Action	Dependencies
DELETE /v3/{domain_id}/gcn/central-network/{central_network_id}/attachments/{attachment_id}	cc:centralNetworkAttachment:delete	• er:instances:get • er:routeTables:get • er:routeTables:listPropagations • er:routeTables:enablePropagation • er:routeTables:disablePropagation • er:routeTables:listAssociations • er:routeTables:associate • er:routeTables:disassociate
GET /v3/{domain_id}/gcn/central-network/{central_network_id}/attachments	cc:centralNetworkAttachment:list	-
POST /v3/{domain_id}/dcaas/p2p-site-networks	cc:siteNetwork:createP2P	-
GET /v3/{domain_id}/dcaas/site-networks	cc:siteNetwork:list	-
GET /v3/{domain_id}/dcaas/site-networks/{site_network_id}	cc:siteNetwork:get	-
PUT /v3/{domain_id}/dcaas/site-networks/{site_network_id}	cc:siteNetwork:update	-
DELETE /v3/{domain_id}/dcaas/site-networks/{site_network_id}	cc:siteNetwork:delete	-

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API	Action	Dependencies
POST /v3/{domain_id}/dcaas/site-network/{site_network_id}/connections/{site_connection_id}/disassociate	cc:siteNetwork:disassociateBandwidth	-
POST /v3/{domain_id}/dcaas/site-network/{site_network_id}/connections/{site_connection_id}/associate	cc:siteNetwork:associateBandwidth	-
POST /v3/{domain_id}/dcaas/site-network/{site_network_id}/connections/{site_connection_id}/update-bandwidth-size	cc:siteNetwork:updateBandwidthSize	-
POST /v3/{domain_id}/dcaas/site-network/{site_network_id}/connections/{site_connection_id}/update-bandwidth	cc:siteNetwork:updateBandwidth	-
GET /v3/{domain_id}/dcaas/site-network/capabilities	cc:capability:list	-
GET /v3/{domain_id}/dcaas/site-network/quotas	cc:quota:list	-

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Resources

A resource type indicates the resources that an identity policy applies to. If you specify a resource type for any action in **Table 5-13**, the resource URN must be specified in the identity policy statements using that action, and the identity policy applies only to resources of this type. If no resource type is specified, the Resource element is marked with an asterisk (*) and the identity policy applies to all resources. You can also set condition keys in an identity policy to define resource types.

The following table lists the resource types that you can define in identity policy statements for CC.

Table 5-13 Resource types supported by CC

Resource Type	URN
cloudConnection	cc::<account-id>:cloudConnection:<cloud-connection-id>
gcbandwidth	cc::<account-id>:gcbandwidth:<gcbandwidth-id>
interRegionBandwidth	cc::<account-id>:interRegionBandwidth:<inter-region-bandwidth-id>
networkInstance	cc::<account-id>:networkInstance:<network-instance-id>
siteNetwork	cc::<account-id>:siteNetwork:<site-network-id>
bandwidthPackage	cc::<account-id>:bandwidthPackage:<bandwidth-package-id>
centralNetwork	cc::<account-id>:centralNetwork:<central-network-id>
centralNetworkAttachment	cc::<account-id>:centralNetworkAttachment:<central-network-attachment-id>

Conditions

Condition Key Overview

A Condition element lets you specify conditions for when an identity policy is in effect. It contains **condition keys** and **operators**.

- The condition key that you specify can be a global condition key or a service-specific condition key.
  - Global condition keys (with the g: prefix) apply to all actions. Cloud services do not need to provide user identity information. Instead, the system automatically obtains such information and authenticates users. For details, see **Global Condition Keys**.
  - Service-specific condition keys (with the abbreviation of a service name plus a colon as the prefix, for example, cc) apply only to operations of the xx service. For details, see **Table 5-14**.

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  - The number of values associated with a condition key in the request context of an API call makes the condition key single-valued or multivalued. Single-valued condition keys have at most one value in the request context of an API call. Multivalued condition keys can have multiple values in the request context of an API call. For example, a request can originate from at most one VPC endpoint, so g:SourceVpce is a single-valued condition key. You can tag resources and include multiple tag key-value pairs in a request, so g:TagKeys is a multivalued condition key.

- A condition operator, condition key, and a condition value together constitute a complete condition statement. An identity policy can be applied only when its request conditions are met. For supported condition operators, see **operators**.

Service-specific condition keys supported by CC

The following table lists the condition keys that you can define in identity policies for CC. You can include these condition keys to specify conditions for when your identity policy is in effect.

Table 5-14 Service-specific condition keys supported by CC

Service-specific Condition Key	Type	Single-valued/ Multivalued	Description
cc:VpcId	string	Single-valued	Filters access by VPC ID.
cc:VirtualGatewayId	string	Single-valued	Filters access by virtual gateway ID.
cc:EnterpriseRouterId	string	Single-valued	Filters access by enterprise router ID.
cc:MultipleEnterpriseRouterIds	string	Multivalued	Filters access by enterprise router IDs.
cc:BandwidthPackageId	string	Single-valued	Filters access by bandwidth package ID.
cc:GlobalConnectionBandwidthId	string	Single-valued	Filters access by global connection bandwidth ID.
cc:GlobalDcGatewayId	string	Single-valued	Filters access by global DC gateway ID.
cc:gcbAssociateResourceType	string	Single-valued	Filters access to global connection bandwidths by resource type.

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Examples of Condition Keys

- cc:VpcId

  For example,Filters access to network instances by VPC ID.

```
{
  "Version": "5.0",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": [
        "cc:networkInstances:create",
        "cc:networkInstances:delete",
        "cc:networkInstances:update"
      ],
      "Condition": {
        "StringEquals": {
          "cc:VpcId": [
            "xxx"
          ]
        }
      }
    }
  ]
}
```

- cc:VirtualGatewayId

  For example,Filters access to network instances by virtual gateway ID.

```
{
  "Version": "5.0",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": [
        "cc:networkInstances:create",
        "cc:networkInstances:delete",
        "cc:networkInstances:update"
      ],
      "Condition": {
        "StringEquals": {
          "cc:VirtualGatewayId": [
            "xxx"
          ]
        }
      }
    }
  ]
}
```

- cc:EnterpriseRouterId

  For example,Filters access to global DC gateways attached to a central network by enterprise router ID.

```
{
  "Version": "5.0",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": [
        "cc:centralNetworkAttachment:createGdgw",
        "cc:centralNetworkAttachment:updateGdgw",
        "cc:centralNetworkAttachment:getGdgw",
        "cc:centralNetworkAttachment:delete"
      ],
      "Condition": {
        "StringEquals": {
          "cc:EnterpriseRouterId": [
            "xxx"
```

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```
        ]
      }
    }
  }
 ]
}
```

- cc:MultipleEnterpriseRouterIds

  For example,Filters access to central networks and enterprise router route table attachments by enterprise router IDs.

```
{
 "Version": "5.0",
 "Statement": [
  {
   "Effect": "Allow",
   "Action": [
    "cc:centralNetwork:create",
    "cc:centralNetwork:createPolicy",
    "cc:centralNetworkAttachment:createErRouteTable",
    "cc:centralNetworkAttachment:updateErRouteTable",
    "cc:centralNetworkAttachment:getErRouteTable",
    "cc:centralNetworkAttachment:delete"
   ],
   "Condition": {
    "StringEquals": {
     "cc:MultipleEnterpriseRouterIds": [
      "xxx"
     ]
    }
   }
  }
 ]
}
```

- cc:BandwidthPackageId

  For example,Filters access to inter-region bandwidths by bandwidth package ID.

```
{
 "Version": "5.0",
 "Statement": [
  {
   "Effect": "Allow",
   "Action": [
    "cc:interRegionBandwidths:create",
    "cc:interRegionBandwidths:delete",
    "cc:interRegionBandwidths:update"
   ],
   "Condition": {
    "StringEquals": {
     "cc:BandwidthPackageId": [
      "xxx"
     ]
    }
   }
  }
 ]
}
```

- cc:GlobalConnectionBandwidthId

  For example,Filters access to central network connections by global connection bandwidth ID.

```
{
 "Version": "5.0",
 "Statement": [
  {
   "Effect": "Allow",
```

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```
    "Action": [
      "cc:centralNetwork:updateConnection"
    ],
    "Condition": {
      "StringEquals": {
        "cc:GlobalConnectionBandwidthId": [
          "xxx"
        ]
      }
    }
  }
 ]
}
```

- cc:GlobalDcGatewayId

  For example,Filters access to global DC gateways attached to a central network by global DC gateway ID.

```
{
 "Version": "5.0",
 "Statement": [
  {
    "Effect": "Allow",
    "Action": [
      "cc:centralNetworkAttachment:createGdgw",
      "cc:centralNetworkAttachment:updateGdgw",
      "cc:centralNetworkAttachment:getGdgw",
      "cc:centralNetworkAttachment:delete"
    ],
    "Condition": {
      "StringEquals": {
        "cc:GlobalDcGatewayId": [
          "xxx"
        ]
      }
    }
  }
 ]
}
```

- cc:gcbAssociateResourceType

  For example,Filters access to the resource binding API or resource unbinding API by the type of the resource bound to the global connection bandwidth.

```
{
 "Version": "5.0",
 "Statement": [
  {
    "Effect": "Allow",
    "Action": [
      "cc:gcbandwidth:associateInstance",
      "cc:gcbandwidth:disassociateInstance",
    ],
    "Condition": {
      "StringEquals": {
        "cc:gcbAssociateResourceType": [
          "xxx"
        ]
      }
    }
  }
 ]
}
```

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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.

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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.

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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.

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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.

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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.

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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.

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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.

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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**

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- **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.

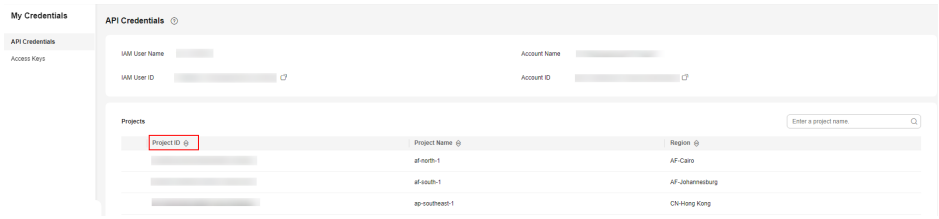
```
{
   "projects": [
      {
         "domain_id": "65ewtrgaggshhk1223245sghjlse684b",
         "is_domain": false,
         "parent_id": "65ewtrgaggshhk1223245sghjlse684b",
         "name": "project_name",
         "description": "",
         "links": {
            "next": null,
            "previous": 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



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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 https://localhost:8080//v3/{domain_id}/ccaas/{resource_type}/tags

Table 7-1 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
resource_type	Yes	String	Resource type. • **cloud-connection**: cloud connection • **bandwidth-package**: bandwidth package

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Request Parameters

Table 7-2 Request header parameters

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

Response Parameters

Status code: 200

Table 7-3 Response body parameters

Parameter	Type	Description
tags	Array of **AggTag** objects	Tag list.
request_id	String	Request ID.

Table 7-4 AggTag

Parameter	Type	Description
key	String	Tag key.
values	Array of strings	List of values with the same key.

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" ]
  } ]
}
```

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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();
        request.withResourceType(ListDomainTagsRequest.ResourceTypeEnum.fromValue("{resource_type}"));
        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
```

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```
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in 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()
        request.resource_type = "{resource_type}"
        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{}
    request.ResourceType = model.GetListDomainTagsRequestResourceTypeEnum().RESOURCE_TYPE
    response, err := client.ListDomainTags(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

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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 https://localhost:8080//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.
resource_id	Yes	String	Resource ID.
tag_key	Yes	String	Key of the tag to be deleted.
resource_type	Yes	String	Resource type. • **cloud-connection**: cloud connection • **bandwidth-package**: bandwidth package

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Request Parameters

Table 7-6 Request header parameters

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

Response Parameters

Status code: 204

Tag deleted.

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);
```

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```
        CcClient client = CcClient.newBuilder()
                .withCredential(auth)
                .withRegion(CcRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteTagRequest request = new DeleteTagRequest();
        request.withResourceId("{resource_id}");
        request.withTagKey("{tag_key}");
        request.withResourceType(DeleteTagRequest.ResourceTypeEnum.fromValue("{resource_type}"));
        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.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 = DeleteTagRequest()
        request.resource_id = "{resource_id}"
        request.tag_key = "{tag_key}"
        request.resource_type = "{resource_type}"
        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 (
```

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```
    "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{}
    request.ResourceId = "{resource_id}"
    request.TagKey = "{tag_key}"
    request.ResourceType = model.GetDeleteTagRequestResourceTypeEnum().RESOURCE_TYPE
    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",

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"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 https://localhost:8080//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.
resource_id	Yes	String	Resource ID.
resource_type	Yes	String	Resource type. • **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.

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

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Table 7-10 Tag

Parameter	Mandatory	Type	Description
key	No	String	Tag key.
value	No	String	Tag value.

Response Parameters

Status code: 204

Tags are created or deleted.

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.)

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```
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();
        request.withResourceId("{resource_id}");

request.withResourceType(BatchCreateDeleteTagsRequest.ResourceTypeEnum.fromValue("{resource_type}"));
        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());
        }
```

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```
    }
}
```

- 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();
        request.withResourceId("{resource_id}");

request.withResourceType(BatchCreateDeleteTagsRequest.ResourceTypeEnum.fromValue("{resource_type}"));
        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());
```

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```
            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()
        request.resource_id = "{resource_id}"
        request.resource_type = "{resource_type}"
        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 *
```

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

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

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

    request := &model.BatchCreateDeleteTagsRequest{}
    request.ResourceId = "{resource_id}"
    request.ResourceType =
model.GetBatchCreateDeleteTagsRequestResourceTypeEnum().RESOURCE_TYPE
    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().
```

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

    request := &model.BatchCreateDeleteTagsRequest{}
    request.ResourceId = "{resource_id}"
    request.ResourceType =
model.GetBatchCreateDeleteTagsRequestResourceTypeEnum().RESOURCE_TYPE
    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 by Tag

Function

This API is used to query resources by tag. This is a historical API. You are advised to use the APIs described in "Querying Cloud Connections by Tag" and "Querying Bandwidth Packages by Tag".

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Calling Method

For details, see **Calling APIs**.

URI

POST https://localhost:8080//v3/{domain_id}/ccaas/{resource_type}/resource-instances/action

Table 7-11 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
resource_type	Yes	String	Resource type. • **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.

Table 7-13 Request body parameters

Parameter	Mandatory	Type	Description
action	No	String	Action. • **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.
offset	No	Integer	Query result offset.

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Parameter	Mandatory	Type	Description
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.)
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.

Table 7-14 AggTag

Parameter	Mandatory	Type	Description
key	No	String	Tag key.
values	No	Array of strings	List of values with the same key.

Table 7-15 Tag

Parameter	Mandatory	Type	Description
key	No	String	Tag key.
value	No	String	Tag value.

Response Parameters

Status code: 200

Table 7-16 Response body parameters

Parameter	Type	Description
resources	Array of **FilterTagResource** objects	Resource list.
request_id	String	Request ID.
total_count	Integer	Total number of resources that meet the query criteria.

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Table 7-17 FilterTagResource

Parameter	Type	Description
resource_id	String	Resource ID.
resource_name	String	Resource name.
resource_detail	String	Resource details.
tags	Array of **Tag** objects	Tags added for a resource.

Table 7-18 Tag

Parameter	Type	Description
key	String	Tag key.
value	String	Tag value.

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"
  } ]
}
```

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Example Responses

Status code: 200

Resource queried by tag.

```
{
  "resources" : [ {
    "resource_id" : "cdfs_cefs_wesas_12_dsad",
    "resource_name" : "resouece1",
    "tags" : [ {
      "key" : "key1",
      "value" : "value1"
    }, {
      "key" : "key2",
      "value" : "value1"
    } ]
  } ],
  "request_id" : "XXX",
  "total_count" : 1000
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

- Querying resource details using specified filter criteria

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cc.v2.region.CcRegion;
import com.huaweicloud.sdk.cc.v2.*;
import com.huaweicloud.sdk.cc.v2.model.*;

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

public class ListResourceByFilterTagSolution {

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

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

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

request.withResourceType(ListResourceByFilterTagRequest.ResourceTypeEnum.fromValue("{resource_type}"));
```

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```
        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);
```

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

request.withResourceType(ListResourceByFilterTagRequest.ResourceTypeEnum.fromValue("{resource_type}"));
        ListResourceByFilterTagRequestBody body = new ListResourceByFilterTagRequestBody();
        [](model.Tag) listbodyMatches = new ArrayList<>();
        listbodyMatches.add(
            new Tag()
                .withKey("resource_name")
                .withValue("resource1")
        );
        []string listTagsValues = new ArrayList<>();
        listTagsValues.add("value1");
        listTagsValues.add("value2");
        []string listTagsValues1 = new ArrayList<>();
        listTagsValues1.add("value1");
        listTagsValues1.add("value2");
        [](model.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 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
```

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```
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()
        request.resource_type = "{resource_type}"
        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>")) \
```

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```
        .build()

    try:
        request = ListResourceByFilterTagRequest()
        request.resource_type = "{resource_type}"
        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()
```

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

    request := &model.ListResourceByFilterTagRequest{}
    request.ResourceType =
model.GetListResourceByFilterTagRequestResourceTypeEnum().RESOURCE_TYPE
    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().
```

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

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

    request := &model.ListResourceByFilterTagRequest{}
    request.ResourceType =
model.GetListResourceByFilterTagRequestResourceTypeEnum().RESOURCE_TYPE
    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.

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Status Codes

Status Code	Description
200	Resource queried by tag.

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 https://localhost:8080//v3/{domain_id}/ccaas/{resource_type}/{resource_id}/tags

Table 7-19 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
resource_type	Yes	String	Resource type. • **cloud-connection**: cloud connection • **bandwidth-package**: bandwidth package
resource_id	Yes	String	Resource ID.

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Request Parameters

Table 7-20 Request header parameters

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

Response Parameters

Status code: 200

Table 7-21 Response body parameters

Parameter	Type	Description
tags	Array of **Tag** objects	Tag list.
request_id	String	Request ID.

Table 7-22 Tag

Parameter	Type	Description
key	String	Tag key.
value	String	Tag value.

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"
  } ]
}
```

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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();
        request.withResourceType(ListTagsRequest.ResourceTypeEnum.fromValue("{resource_type}"));
        request.withResourceId("{resource_id}");
        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__":
```

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```
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in 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 = ListTagsRequest()
        request.resource_type = "{resource_type}"
        request.resource_id = "{resource_id}"
        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{}
    request.ResourceType = model.GetListTagsRequestResourceTypeEnum().RESOURCE_TYPE
    request.ResourceId = "{resource_id}"
    response, err := client.ListTags(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

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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 https://localhost:8080//v3/{domain_id}/ccaas/{resource_type}/{resource_id}/tags

Table 7-23 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID.
resource_id	Yes	String	Resource ID.
resource_type	Yes	String	Resource type. • **cloud-connection**: cloud connection • **bandwidth-package**: bandwidth package

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Request Parameters

Table 7-24 Request header parameters

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

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.
value	No	String	Tag value.

Response Parameters

Status code: 204

Tag added.

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.

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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();
        request.withResourceId("{resource_id}");
        request.withResourceType(CreateTagRequest.ResourceTypeEnum.fromValue("{resource_type}"));
        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
```

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```
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 = CreateTagRequest()
        request.resource_id = "{resource_id}"
        request.resource_type = "{resource_type}"
        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(
```

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

    request := &model.CreateTagRequest{}
    request.ResourceId = "{resource_id}"
    request.ResourceType = model.GetCreateTagRequestResourceTypeEnum().RESOURCE_TYPE
    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**.

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