

Alibaba Cloud Cloud Enterprise Network

API Reference

Issue: 20190815

Legal disclaimer

Alibaba Cloud reminds you to carefully read and fully understand the terms and conditions of this legal disclaimer before you read or use this document. If you have read or used this document, it shall be deemed as your total acceptance of this legal disclaimer.








1. You shall download and obtain this document from the Alibaba Cloud website or other Alibaba Cloud-authorized channels, and use this document for your own legal business activities only. The content of this document is considered confidential information of Alibaba Cloud. You shall strictly abide by the confidentiality obligations. No part of this document shall be disclosed or provided to any third party for use without the prior written consent of Alibaba Cloud.
2. No part of this document shall be excerpted, translated, reproduced, transmitted, or disseminated by any organization, company, or individual in any form or by any means without the prior written consent of Alibaba Cloud.
3. The content of this document may be changed due to product version upgrades, adjustments, or other reasons. Alibaba Cloud reserves the right to modify the content of this document without notice and the updated versions of this document will be occasionally released through Alibaba Cloud-authorized channels. You shall pay attention to the version changes of this document as they occur and download and obtain the most up-to-date version of this document from Alibaba Cloud-authorized channels.
4. This document serves only as a reference guide for your use of Alibaba Cloud products and services. Alibaba Cloud provides the document in the context that Alibaba Cloud products and services are provided on an "as is", "with all faults" and "as available" basis. Alibaba Cloud makes every effort to provide relevant operational guidance based on existing technologies. However, Alibaba Cloud hereby makes a clear statement that it in no way guarantees the accuracy, integrity, applicability, and reliability of the content of this document, either explicitly or implicitly. Alibaba Cloud shall not bear any liability for any errors or financial losses incurred by any organizations, companies, or individuals arising from their download, use, or trust in this document. Alibaba Cloud shall not, under any circumstances, bear responsibility for any indirect, consequential, exemplary, incidental, special, or punitive damages, including lost profits arising from the use

or trust in this document, even if Alibaba Cloud has been notified of the possibility of such a loss.

5. By law, all the content of the Alibaba Cloud website, including but not limited to works, products, images, archives, information, materials, website architecture, website graphic layout, and webpage design, are intellectual property of Alibaba Cloud and/or its affiliates. This intellectual property includes, but is not limited to, trademark rights, patent rights, copyrights, and trade secrets. No part of the Alibaba Cloud website, product programs, or content shall be used, modified, reproduced, publicly transmitted, changed, disseminated, distributed, or published without the prior written consent of Alibaba Cloud and/or its affiliates. The names owned by Alibaba Cloud shall not be used, published, or reproduced for marketing, advertising, promotion, or other purposes without the prior written consent of Alibaba Cloud. The names owned by Alibaba Cloud include, but are not limited to, "Alibaba Cloud", "Aliyun", "HiChina", and other brands of Alibaba Cloud and/or its affiliates, which appear separately or in combination, as well as the auxiliary signs and patterns of the preceding brands, or anything similar to the company names, trade names, trademarks, product or service names, domain names, patterns, logos, marks, signs, or special descriptions that third parties identify as Alibaba Cloud and/or its affiliates).
6. Please contact Alibaba Cloud directly if you discover any errors in this document.

Generic conventions

Table -1: Style conventions

| Style | Description | Example |
|---|--|--|
|  | This warning information indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results. |  Danger: Resetting will result in the loss of user configuration data. |
|  | This warning information indicates a situation that may cause major system changes, faults, physical injuries, and other adverse results. |  Warning: Restarting will cause business interruption. About 10 minutes are required to restore business. |
|  | This indicates warning information, supplementary instructions, and other content that the user must understand. |  Notice: Take the necessary precautions to save exported data containing sensitive information. |
| | This indicates supplemental instructions, best practices, tips, and other content that is good to know for the user. |  Note: You can use Ctrl + A to select all files. |
| > | Multi-level menu cascade. | Settings > Network > Set network type |
| Bold | It is used for buttons, menus, page names, and other UI elements. | Click OK . |
| Courier font | It is used for commands. | Run the <code>cd / d C :/ windows</code> command to enter the Windows system folder. |
| <i>Italics</i> | It is used for parameters and variables. | <code>bae log list --instanceid <i>Instance_ID</i></code> |
| [] or [a b] | It indicates that it is an optional value, and only one item can be selected. | <code>ipconfig [-all -t]</code> |

| Style | Description | Example |
|---------------------------------------|--|------------------------------------|
| <code>{}</code> or <code>{a b}</code> | It indicates that it is a required value, and only one item can be selected. | <code>swich {stand slave}</code> |

Contents

| | |
|--|----|
| Legal disclaimer..... | I |
| Generic conventions..... | I |
| 1 API overview..... | 1 |
| 2 Call CEN APIs..... | 3 |
| 3 RAM authentication..... | 6 |
| 4 Use APIs to establish connections..... | 10 |
| 5 Common parameters..... | 12 |
| 6 Common error codes..... | 14 |
| 7 CEN instances..... | 21 |
| 7.1 CreateCen..... | 21 |
| 7.2 ModifyCenAttribute..... | 22 |
| 7.3 DescribeCens..... | 24 |
| 7.4 DeleteCen..... | 27 |
| 7.5 AttachCenChildInstance..... | 28 |
| 7.6 DescribeCenAttachedChildInstanceAttribute..... | 29 |
| 7.7 DescribeCenAttachedChildInstances..... | 31 |
| 7.8 DetachCenChildInstance..... | 34 |
| 7.9 DescribeGrantRulesToCen..... | 35 |
| 7.10 GrantInstanceToCen..... | 37 |
| 7.11 RevokeInstanceFromCen..... | 38 |
| 8 Bandwidth packages..... | 41 |
| 8.1 CreateCenBandwidthPackage..... | 41 |
| 8.2 AssociateCenBandwidthPackage..... | 45 |
| 8.3 UnassociateCenBandwidthPackage..... | 47 |
| 8.4 DescribeCenBandwidthPackages..... | 48 |
| 8.5 ModifyCenBandwidthPackageAttribute..... | 51 |
| 8.6 ModifyCenBandwidthPackageSpec..... | 53 |
| 8.7 DescribeCenGeographicSpanRemainingBandwidth..... | 54 |
| 8.8 DeleteCenBandwidthPackage..... | 55 |
| 9 Cross-region interconnection bandwidth..... | 58 |
| 9.1 SetCenInterRegionBandwidthLimit..... | 58 |
| 9.2 DescribeCenInterRegionBandwidthLimits..... | 59 |
| 9.3 DescribeGeographicRegionMembership..... | 61 |
| 10 Manage route entries..... | 64 |
| 10.1 DescribeCenRegionDomainRouteEntries..... | 64 |
| 10.2 DescribeRouteConflict..... | 66 |
| 10.3 PublishRouteEntries..... | 69 |

| | |
|---|------------|
| 10.4 DescribePublishedRouteEntries..... | 71 |
| 10.5 WithdrawPublishedRouteEntries..... | 75 |
| 11 Health checks..... | 77 |
| 11.1 EnableCenVbrHealthCheck..... | 77 |
| 11.2 DescribeCenVbrHealthCheck..... | 78 |
| 11.3 DisableCenVbrHealthCheck..... | 81 |
| 12 Flow logs..... | 83 |
| 12.1 CreateFlowlog..... | 83 |
| 12.2 ModifyFlowLogAttribute..... | 85 |
| 12.3 DescribeFlowlogs..... | 87 |
| 12.4 ActiveFlowLog..... | 90 |
| 12.5 DeactiveFlowLog..... | 91 |
| 12.6 DeleteFlowlog..... | 92 |
| 13 Routing policies..... | 95 |
| 13.1 CreateCenRouteMap..... | 95 |
| 13.2 DescribeCenRouteMaps..... | 105 |
| 13.3 ModifyCenRouteMap..... | 112 |
| 13.4 DeleteCenRouteMap..... | 122 |
| 14 PrivateZone..... | 125 |
| 14.1 RoutePrivateZoneInCenToVpc..... | 125 |
| 14.2 DescribeCenPrivateZoneRoutes..... | 127 |
| 14.3 UnroutePrivateZoneInCenToVpc..... | 130 |

1 API overview

The following are CEN APIs.

- For more API resources, visit [API Explorer](#).
- For VPC APIs, see [VPC API Reference](#).

| API | Description |
|------------------------------------|--|
| CreateCen | Create a CEN instance. |
| ModifyCenAttribute | Modify the name and description of a CEN instance. |
| DeleteCen | Delete a CEN instance. |
| DescribeCens | Query CEN instances. |
| AttachCenChildInstance | Attach a network (VPC or VBR) to a CEN instance. |
| GrantInstanceToCen | Authorize CEN to attach the network that belongs to another account. |
| RevokeInstanceFromCen | Cancel the authorization of a network to a CEN instance. |
| DescribeCenAttachedChildInstances | Query the networks attached to a CEN instance. |
| DescribeGrantRulesToCen | Query the networks that have been authorized to CEN. |
| DetachCenChildInstance | Detach a network (VPC or VBR) from a CEN instance. |
| CreateCenBandwidthPackage | Create a bandwidth package. |
| AssociateCenBandwidthPackage | Bind a bandwidth package to a specified CEN instance. |
| UnassociateCenBandwidthPackage | Unbind a bandwidth package from a CEN instance. |
| DescribeCenBandwidthPackages | Query the purchased bandwidth packages. |
| ModifyCenBandwidthPackageAttribute | Modify the name and description of a bandwidth package. |
| ModifyCenBandwidthPackageSpec | Modify a bandwidth package. |

| API | Description |
|--|---|
| SetCenInterRegionBandwidthLimit | Configure the cross-regional interconnection bandwidth. |
| DescribeCenInterRegionBandwidthLimits | Query the cross-regional interconnection bandwidths set for different regions. |
| DescribeGeographicRegionMembership | Query the regions in a specified area. |
| SetCenInterRegionBandwidthLimit | Configure the cross-regional interconnection bandwidth. |

2 Call CEN APIs

Request structure

CEN APIs belong to the RPC type. You can call CEN APIs by sending HTTP requests.

The request structure is as follows:

```
http :// Endpoint /? Action = xx & Parameters
```

Where:

- **Endpoint** is the entry of the Alibaba Cloud service to call. The endpoint of CEN is `cbn . aliyuncs . com`.
- **Action** is the action to perform. For example, use the `DescribeCens` action to query created CEN instances.
- **Version** is the version of API to call. The API version of CEN is `09 / 12 / 2017`.
- **Parameters** are request parameters separated by ampersands (&).

Request parameters consist of common parameters and API specific parameters.

Common parameters include VPI version, credentials and more.

The following is an example using the `DescribeCens` API to query the created CEN instances:



Note:

To make it easy to read, the API request is displayed in the following format in the document:

```
https :// cbn . aliyuncs . com /? Action = CreateCen
& Format = xml
& Version = 2017 - 09 - 12
& Signature = xxxx % xxxx % 3D
& SignatureM ethod = HMAC - SHA1
& SignatureN once = 1521552885 2396
& SignatureV ersion = 1 . 0
& AccessKeyI d = key - test
& Timestamp = 2012 - 06 - 01T12 : 00 : 00Z
```

...

API authorization

For the security of your account, we recommend that you use a RAM user to call APIs. Before using a RAM user to call an API, you must grant the RAM user the corresponding permission to call the API by creating an authorization policy and attaching the policy to the RAM user.

For more information, see [RAM authentication](#).

API signature

CEN authenticates each API request. You must include the signature in the request no matter you submit an HTTP or HTTPS request.

CEN performs symmetric encryption by using the AccessKey ID and AccessKey Secret to verify the identities of request senders. AccessKey is an identity credential issued to Alibaba Cloud accounts and the RAM users (similar to the login password). The AccessKey ID is used to verify the identity of the user, and the AccessKey Secret is used to encrypt the signature string and is also the key used by the server to verify the signature string. The AccessKey Secret must be kept strictly confidential.

For an RPC API, you must add the signature to the API request in the following format:

```
https://endpoint/?SignatureVersion=1.0&SignatureMethod=HMAC-SHA1
&Signature=CT9X0VtwR86fNWSnsc6v8YG0juE%3D&SignatureNonce=
3ee8c1b8-83d3-44af-a94f-4e0ad82fd6cf
```

Take the DescribeCens as an example. If the AccessKey ID is `testid`, and the AccessKey Secret is `testsecret`, and the original request URL is as follows:

```
http://cbn.aliyuncs.com/?Action=DescribeCens
&Timestamp=2016-02-23T12:46:24Z
&Format=XML
&AccessKeyId=testid&Action=DescribeCens
&SignatureMethod=HMAC-SHA1
&SignatureNonce=3ee8c1b8-83d3-44af-a94f-4e0ad82fd6cf
&Version=2014-05-26&SignatureVersion=1.0
```

Complete these steps to calculate the signature:

1. Use the request parameters to create a canonicalized query string to sign.

```
GET %2F&AccessKeyId%3Dtestid&Action%3DDescribeCens
&Format%3DXML&SignatureMethod%3DHMAC-SHA1&SignatureNonce%3D3ee8c1b8-83d3-44af-a94f-4e0ad82fd6cf
```

```
&SignatureVersion=1.0&Timestamp=2016-02-23T12:25:30.46Z&Version=2014-05-15
```

2. Compute the HMAC of the string to sign.

Append an ampersand (&) to the AccessKey Secret to use the new string as the key to compute the HMAC. In this example, the key is `testsecret&`.

```
CT9X0VtwR8 6fNWSnsc6v 8YG0juE =
```

3. Add the signature to the request URL:

```
http://cn.aliyuncs.com/?Action=DescribeCens
&Timestamp=2016-02-23T12:46:24Z
&Format=XML
&AccessKeyId=testid
&SignatureMethod=HMAC-SHA1
&SignatureNonce=3ee8c1b8-83d3-44af-a94f-4e0ad82fd6cf
&Version=2014-05-26
&SignatureVersion=1.0
&Signature=CT9X0VtwR8%206fNWSnsc6v%208YG0juE%3D
```

3 RAM authentication

Before using a RAM user to call an API, you must grant the RAM user the corresponding permission to call the API by creating an authorization policy and attaching the policy to the RAM user.

You can specify the resource that a RAM user has permission to operate in the authorization policy. In the authorization policy, an Alibaba Resource Name (ARN) is used to identify the resource to authorize.

Table 3-1: The following table lists the available CEN resources and the corresponding ARN formats.

| Resource type | ARN format |
|---------------------|--|
| ceninstance | acs:cen::\$accountid:ceninstance/\$ceninstanceidacs:cen::\$accountid:ceninstance |
| cenbandwidthpackage | acs:cen::\$accountid:cenbandwidthpackage/\$cenbandwidthpackageidacs:cen::\$accountid:cenbandwidthpackage/* |

Table 3-2: Authentication rules

| Authorization action | Authorization rule |
|-------------------------|---|
| cen: CreateCen | acs:cen::\$accountid:ceninstance/ |
| cen: ModifyCenAttribute | acs:cen:*:\$accountid:ceninstance/\$ceninstanceid |
| cen: DeleteCen | acs:cen:*:\$accountid:ceninstance/\$ceninstanceid |
| cen: DescribeCens | acs:cen::\$accountid:ceninstance/ |

| Authorization action | Authorization rule |
|---|---|
| cen: AttachCenChildInstance | <ul style="list-style-type: none"> • <code>acs : cen :*: \$ accountid : ceninstanc e / \$ ceninstanc eid</code> • VPC: <code>acs : vpc : \$ regionid : \$ accountid : vpc / \$ vpcid</code> • Virtual Border Router (VBR): <code>acs : vpc : \$ regionid : \$ accountid : virtualbor derrouter / \$ virtualbor derrouteri d</code> |
| cen: DetachCenChildInstance | <ul style="list-style-type: none"> • <code>acs : cen :*: \$ accountid : ceninstanc e / \$ ceninstanc eid</code> • VPC: <code>acs : vpc : \$ regionid : \$ accountid : vpc / \$ vpcid</code> • VBR: <code>acs : vpc : \$ regionid : \$ accountid : virtualbor derrouter / \$ virtualbor derrouteri d</code> |
| cen: DescribeCenAttachedChildInstances | <code>acs : cen :*: \$ accountid : ceninstanc e / \$ ceninstanc eid</code> |
| cen: DescribeCenRegionDomainRouteEntries | <code>acs : cen :*: \$ accountid : ceninstanc e / \$ ceninstanc eid</code> |
| cen: EnableCenVbrHealthCheck | <code>acs : cen :*: \$ accountid : ceninstanc e / \$ ceninstanc eidacs : vpc : \$ regionid : \$ accountid : virtualbor derrouter / \$ virtualbor derrouteri d</code> |
| cen: DisableCenVbrHealthCheck | <code>acs : cen :*: \$ accountid : ceninstanc e / \$ ceninstanc eidacs : vpc : \$ regionid : \$ accountid : virtualbor derrouter / \$ virtualbor derrouteri d</code> |
| cen: DescribeCenVbrHealthCheck | <code>acs : cen :*: \$ accountid : ceninstanc e / \$ ceninstanc eidacs : vpc : \$ regionid : \$ accountid : virtualbor derrouter / \$ virtualbor derrouteri d</code> |
| cen: CreateCenBandwidthPackage | <code>acs:cen:: \$ accountid : cenbandwid thpackage /</code> |

| Authorization action | Authorization rule |
|--|--|
| cen: DescribeCenBandwidthPackage | acs:cen::\$accountid:cenbandwidthpackage/ |
| cen: ModifyCenBandwidthPackageAttribute | acs:cen::\$accountid:cenbandwidthpackage/cenbandwidthpackageid |
| cen: ModifyCenBandwidthPackageSpec | acs:cen::\$accountid:cenbandwidthpackage/\$cenbandwidthpackageid |
| cen: DeleteCenBandwidthPackage | acs:cen::\$accountid:bandwidthpackage/\$cenbandwidthpackageid |
| cen: AssociateCenBandwidthPackage | acs:cen::\$accountid:ceninstance/\$ceninstanceidacs:cen::\$accountid:bandwidthpackage/\$cenbandwidthpackageid |
| cen: UnassociateCenBandwidthPackage | acs:cen::\$accountid:ceninstance/\$ceninstanceidacs:cen::\$accountid:bandwidthpackage/\$cenbandwidthpackageid |
| cen: DescribeCenGeographicSpanRemainingBandwidth | acs:cen::\$accountid:ceninstance/\$ceninstanceid |
| cen: SetCenInterRegionBandwidthLimit | acs:cen::\$accountid:ceninstance/\$ceninstanceid |
| cen: DescribeCenInterRegionBandwidthLimits | acs:cen::\$accountid:ceninstance/\$ceninstanceid |
| cen: DescribeRouteConflict | <ul style="list-style-type: none"> • VPC: acs:vpc:\$regionid:\$accountid:vpc/\$vpcid • VBR: acs:vpc:\$regionid:\$accountid:virtualborderrouter/\$virtualborderrouterid |

| Authorization action | Authorization rule |
|---|-----------------------------|
| cen: DescribeGeographicRegionMembership | No authentication required. |

4 Use APIs to establish connections

You can call CEN APIs to connect networks (VPCs or VBRs) in different scenarios.

Interconnection in the same region using the same account

To connect networks in the same region using the same account, complete the following steps:

1. Create a CEN instance using the [#unique_8](#) API.
2. Attach a network instance to CEN using the [AttachCenChildInstance](#) API.

Cross-regional interconnection using the same account

To connect networks in different regions using the same account, complete the following steps:

1. Create a CEN instance using the [CreateCen](#) API.
2. Attach a network to CEN using the [AttachCenChildInstance](#) API.
3. Purchase a bandwidth package using the [CreateCenBandwidthPackage](#) API.
4. Bind the bandwidth package to CEN using the [AssociateCenBandwidthPackage](#) API.
5. Allocate a cross-regional interconnection bandwidth using the [SetCenInterRegionBandwidthLimit](#) API.

Cross-account interconnection in the same region

The following example shows you how to connect networks in the same region using different accounts:

- Account A: the owner of CEN and network VPC1.
- Account B: the owner of network VPC2.

To connect VPC1 and VPC2, complete the following steps:

1. Account A creates a CEN instance using the [CreateCen](#) API.
2. Account A attaches VPC1 to CEN using the [AttachCenChildInstance](#) API.
3. Account B authorizes Account A to attach VPC2 using the [GrantInstanceToCen](#) API .
4. Account A attaches VPC2 to CEN using the [AttachCenChildInstance](#) API .
5. Account A purchases a bandwidth package according to the regions of VPC 1 and VPC 2 using the [CreateCenBandwidthPackage](#) API.

6. Account A binds the bandwidth package to CEN using the [AssociateCenBandwidthPackage](#) API.
7. Account A allocates a cross-regional interconnection bandwidth using the [SetCenInterRegionBandwidthLimit](#) API.

5 Common parameters

The following common request parameters must be added each time calling an API, and a request ID will be returned no matter the request is successful or not.

Common request parameters

Public request parameters are request parameter that each interface uses.

Table 5-1: Common request parameters

| Name | Type | Require | Description |
|------------------|--------|---------|--|
| Format | String | No | The format of the response. Valid values: JSON (default value) XML |
| Version | String | Yes | The version of the API in the format of YYYY - MM - DD . Valid value: 2017 - 09 - 12 |
| AccessKeyId | String | Yes | The AccessKey ID of the user who calls the API. |
| Signature | String | Yes | The request signature. |
| SignatureMethod | String | Yes | The algorithm used to create the request signature. Valid value: HMAC - SHA1 |
| Timestamp | String | Yes | Request timestamp. The date format follows the ISO8601 standard and uses UTC time. The format is YYYY - MM - DDThh : mm : ssZ . Example: 2014-11-11T12:00:00Z (November 11, 2014 at 20:00:00, Beijing time) |
| SignatureVersion | String | Yes | The signature version to use. Valid value: 1 . 0 |

| Name | Type | Require | Description |
|----------------|--------|---------|---|
| SignatureNonce | String | Yes | A random number for the signature to prevent from network attacks. Different random numbers must be used for different requests. |

Example

```
https://cbn.aliyuncs.com/?Action=DescribeCens
&TimeStamp=2014-05-19T10%3A33%3A56Z
&Format=xml
&AccessKeyId=testid
&Action=DescribeCens
&SignatureMethod=Hmac-SHA1
&CenId= CenID
&SignatureNonce=NwDaxvLU6tFE0DVb
&Version=2016-04-28
&SignatureVersion=1.0
&Signature= Signature
```

Common response parameters

After the API service is called, the returned data adopts a uniform format. A returned HTTP status code of 2xx indicates that the call was successful. A returned HTTP status code of 4xx or 5xx indicates that the call fails. For a successful call, the primary formats of returned data are XML and JSON. When a request is sent, an external system can input parameters to specify the format of returned data. The default format is JSON.

Each time you send a request to call an interface, the system returns a unique identification code (`RequestId`), whether the request is successful.

6 Common error codes

| Error code | Error message | HTTP status | Description |
|--|--|-------------|---|
| ParameterIllegal . AliUid | The parameter of aliUid is illegal . | 400 | Invalid account ID. |
| ParameterIllegal . Bid | The parameter of bid is illegal . | 400 | Invalid billing ID. |
| ParameterIllegal . InstanceId | The parameter of instance id is illegal . | 400 | Invalid instance ID. |
| ParameterIllegal . ChildInstanceRegionId | The parameter of child instance region id is illegal . | 400 | Invalid region ID of the specified network . |
| ParameterIllegal . ChildInstanceUid | The parameter of child instance uid is illegal . | 400 | The account ID of the attached network is invalid. |
| ParameterIllegal . ChildInstanceBid | The parameter of child instance bid is illegal . | 400 | The billing ID of the network is invalid. |
| ParameterIllegal . ChildInstanceType | The parameter of child instance type is illegal . | 400 | Invalid network type. The support networks are VPC and VBR. |
| ParameterIllegal . ChildInstanceId | The parameter of child instance id is illegal . | 400 | Invalid network ID. |

| Error code | Error message | HTTP status | Description |
|--|---|-------------|---|
| ParameterIllegal . BwpAliUid | The parameter of bandwidth package aliUid is illegal . | 400 | The account ID of the bandwidth package is invalid. |
| ParameterIllegal . BwpBid | The parameter of bandwidth package bid is illegal . | 400 | The billing ID of the bandwidth package is invalid. |
| ParameterIllegal . BwpInstanceId | The parameter of bandwidth package instance id is illegal . | 400 | Invalid bandwidth package ID. |
| ParameterIllegal . BandwidthLimit | The parameter of bandwidth limit is illegal . | 400 | Invalid bandwidth limit. |
| ParameterIllegal . RegionId | The parameter of region id is illegal . | 400 | Invalid region ID. |
| ParameterIllegal . VbrInstanceRegionId | The parameter of vbr instance region id is illegal . | 400 | Invalid VBR ID. |
| ParameterIllegal . VbrInstanceUid | The parameter of vbr instance uid is illegal . | 400 | Invalid account ID of the specified VBR. |
| ParameterIllegal . VbrInstanceBid | The parameter of vbr instance bid is illegal . | 400 | Invalid billing ID of the specified VBR |

| Error code | Error message | HTTP status | Description |
|----------------------------------|---|-------------|---|
| ParameterIllegal . VbrInstanceId | The parameter of vbr instance id is illegal . | 400 | Invalid VBR ID. |
| InvalidName | The name is invalid . | 400 | Invalid name. |
| InvalidDescription | The description is invalid . | 400 | Invalid description. |
| InvalidParameter | The parameter is invalid. | 400 | Invalid parameters. |
| NameIllegal | The name is illegal | 400 | Invalid name. |
| DescriptionIllegal | The description is illegal | 400 | Invalid description. |
| ParameterMustNotNull | The parameter must not empty . | 400 | The required parameters are missing. |
| ParameterError | The parameter is error . | 400 | Invalid parameters. |
| InstanceType . NotSupport | The type of instance is not support . | 400 | Invalid network type. The support networks are VPC and VBR. |
| FilterKey . NotSupport | The filter key is not support. | 400 | Invalid filter key. |
| IdempotenceParam . NotMatch | The parameter of idempotence is not match . | 400 | The idempotence check fails. |
| MissingParameter | The parameter is missing . | 400 | The required parameters are missing. |
| GeographicSpan . NotFound | The specified geographic span is not found . | 404 | Invalid area. |

| Error code | Error message | HTTP status | Description |
|-----------------------------|---|-------------|--|
| InventoryExceeded | The requested bandwidth has exceeded the bandwidth inventory currently available . | 400 | Exceeds the bandwidth quota. |
| Unauthorized | It ' s not authorized . | 401 | You do not have permissions to perform the operation. |
| ForbiddenBySubBid | User not authorized to operate on the specified resource as your account is created by another user . | 403 | You do not have permissions to perform the operation. |
| Forbidden | User not authorized to operate on the specified resource . | 403 | You do not have permissions for the resource to operate. |
| ParameterInstanceId | The specified instance id does not exist . | 404 | The instance does not exist. |
| ParameterBandwidthPackageId | The specified bandwidth package instance id does not exist . | 404 | The bandwidth package does not exist. |

| Error code | Error message | HTTP status | Description |
|---|---|-------------|---|
| ParameterCenInstance Id | The specified CEN instance id does not exist . | 404 | The CEN instance does not exist. |
| InvalidOperation . CenInstanceStatus | The CEN instance is not in a valid state for the operation . | 409 | The CEN instance is not in a valid state for the operation. Try later. |
| InvalidOperation . ChildInstanceStatus | The child - instance is not in a valid state for the operation . | 409 | The CEN instance is not in a valid state for the operation. Try later. |
| InvalidOperation . BwpBusinessStatus | The CEN bandwidth package is not in a valid business state for the operation . | 409 | The bandwidth package is in an unoperational state, please do it later. |
| The bandwidth package is not in a valid state for the operation . Try later . | Operation is invalid because a bandwidth package corresponding to the geographic span is not associated . | 409 | No interconnection areas are bound to the bandwidth package. |

| Error code | Error message | HTTP status | Description |
|--|---|-------------|--|
| InvalidOperation . BwpBandwidthExceeded | Operation is invalid because the total bandwidth limit has exceeded that of the bandwidth package . | 409 | The cross-region interconnection bandwidth exceeds the bandwidth limit of the bandwidth package. |
| InvalidOperation . VbrNotAttachedToCen | Operation is invalid because the VBR instance is not attached to the CEN instance . | 409 | The VBR is not attached to the CEN instance. |
| InvalidOperation . VbrCenAttachmentStatus | The VBR instance to CEN attachment is not in a valid state for the operation . | 409 | The VBR instance is not in a valid state for the operation. Try later. |
| InvalidOperation . ChildInstanceAlreadyAttached | Operation is invalid because the child - instance has already been attached to another CEN . | 409 | The network instance has already been attached to another CEN instance. |
| InvalidOperation . AttachedChildInstanceExist | Operation is invalid because the child - instance have not been detached . | 409 | The network has not been detached. |

| Error code | Error message | HTTP status | Description |
|-----------------------------|---|-------------|--|
| InstanceStatus . NotSupport | The status of instance is not support . | 409 | Cannot perform this operation because the status of the instance is not supported. |
| DB . Error | db error | 500 | An error occurs in the database. |
| Operation . Blocking | Operation blocking , try again later . | 500 | The operation is in progress. Try later. |
| InternalError | Internal error . | 500 | An internal error occurs. |

7 CEN instances

7.1 CreateCen

Create a CEN instance. After you create a CEN instance, you can attach networks to it.

Request parameters

| Name | Type | Required | Description |
|-------------|--------|----------|--|
| Action | String | Yes | The action to perform. Valid value: CreateCen |
| Name | String | No | The name of the instance. The name can be 2-128 characters in length. It can start with an uppercase letter, lowercase letter, or Chinese character. It can contain numbers, underscores (_), and hyphens (-), but cannot start with <code>http ://</code> or <code>https ://</code> . |
| Description | String | No | The description of the instance. The name can be 2-256 characters in length. It can start with an uppercase letter, lowercase letter, or Chinese character. It can contain numbers, underscores (_), and hyphens (-), but cannot start with <code>http ://</code> or <code>https ://</code> . |
| ClientToken | String | No | A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and is guaranteed to be unique among different requests. The maximum length is 64 ASCII characters. |

Response parameters

| Name | Type | Description |
|-------|--------|------------------------|
| CenId | String | The ID of the request. |

Examples

Request example

```
https://cn-hangzhou.aliyuncs.com/?Action=CreateCen
&RegionId=cn-hangzhou
&CommonParameters
```

Response example

• XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<CreateCenResponse>
  <CenId>Cen-dc4vwznpwb-obrlcm6w</CenId>
  <RequestId>0C2EE7A8-74D4-4081-8236-CEBDE3BBCF50</
  RequestId>
</CreateCenResponse>
```

• JSON format

```
"CenId":"Cen-dc4vwznpwb-obrlcm6w",
"RequestId":"0C2EE7A8-74D4-4081-8236-CEBDE3BBCF50"
```

7.2 ModifyCenAttribute

Modify the name and description of a CEN instance.

Request parameters

| Name | Type | Required | Description |
|--------|--------|----------|--|
| Action | String | Yes | The action to perform. Valid value: ModifyCenAttribute |
| CenId | String | Yes | The ID of the CEN instance. |

| Name | Type | Required | Description |
|-------------|--------|----------|--|
| Name | String | No | The name of the instance. The name can be 2-128 characters in length. It can start with an uppercase letter, lowercase letter, or Chinese character. It can contain numbers, underscores (_), and hyphens (-), but cannot start with <code>http://</code> or <code>https://</code> . |
| Description | String | No | The description of the instance. The name can be 2-256 characters in length. It can start with an uppercase letter, lowercase letter, or Chinese character. It can contain numbers, underscores (_), and hyphens (-), but cannot start with <code>http://</code> or <code>https://</code> . |

Response parameters

| Name | Type | Description |
|-----------|--------|------------------------|
| RequestId | String | The ID of the request. |

Examples

Request example

```
https://cnb.aliyuncs.com/?Action=ModifyCenAttribute
&CenId=cen-04sgjpvkc062ahzd26
&Name=cen1
&CommonParameters
```

Response example

- XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<ModifyCenAttributeResponse>
  <RequestId>13526224-5780-4426-8BDF-BC8B08700F22</RequestId>
</ModifyCenAttributeResponse>
```

- JSON format

```
{}
```

```
" RequestId ":" 13526224 - 5780 - 4426 - 8BDF - BC8B08700F 22 "
```

7.3 DescribeCens

Query all CEN instances under an account.

Request parameters

| Name | Type | Required | Description |
|---------------------------|---------|----------|--|
| Action | String | Yes | The action to perform. Valid value: DescribeCens |
| Filter . n . Key | String | No | Filter keys. Up to five filter keys are supported. The valid value of n is [1,5]. You can provide multiple values for each filter key. The multiple values are of the "or" relation , that is, the filtering key is met as long as one value is met. The filter keys are of the "and" relation, that is, a result is found only when all filtering keys are met. The following are available filter keys: <ul style="list-style-type: none"> · CenId : The ID of the CEN instance. · Name : The name of the CEN instance. · CenBandwidthPackageId : The ID of the bandwidth package. |
| Filter . n . Value . m | String | No | The value of the corresponding filter key. The valid value of m is [1, 5]. |
| PageNumber | Integer | No | The number of pages to return. The default value is 1 . |
| PageSize | Integer | No | The number of rows per page. The maximum value is 50 and the default value is 10 . |

Response parameters

| Name | Type | Description |
|------------|---------|--|
| RequestId | String | The ID of the request. |
| TotalCount | String | The number of queried entries. |
| PageNumber | Integer | The current page number. |
| PageSize | String | The number of entries on the current page. |
| Cens | List | A list of CEN instances. |

Table 7-1: CEN

| Name | Type | Description |
|------------------------|--------|--|
| CenId | String | The ID of the CEN instance. |
| Name | String | The name of the CEN instance. |
| Status | String | The status of the CEN instance, including Creating , Active , and Deleting . |
| CenBandwidthPackageIds | List | A list of bandwidth packages. |
| Description | String | The description of the CEN instance. |

Examples

Request example

```
https://cn-northeast-1.aliyuncs.com/?Action=DescribeCens&CommonParameters
```

Response example

• XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DescribeCensResponse>
<Cens>
  <Cen>
    <CenBandwidthPackageIds>
      <CenBandwidthPackageId>
        <CenBandwidthPackageId>cenbwp-oq2ehpxq4zhwp790l7</CenBandwidthPackageId>
        <CenBandwidthPackageId>cenbwp-18qmj0bahl3yskktho</CenBandwidthPackageId>
      </CenBandwidthPackageIds>
    </Cen>
  </Cens>
</DescribeCensResponse>
```

```

        </ CenBandwid thPackageI ds >
        < CenId > cen - kojok19x3j 0q6kx5qf </ CenId >
        < Descriptio n > jzwe 0207 </ Descriptio n >
        < Name > jzwen_0207 _01 </ Name >
        < Status > Active </ Status >
    </ Cen >
    < Cen >
        < CenBandwid thPackageI ds >
            < CenBandwid thPackageI d >
                < CenBandwid thPackageI d > cenbwp - 3o2zy4s6ji
g88pn325 </ CenBandwid thPackageI d >
                < CenBandwid thPackageI d > cenbwp - hq2ad760ht
rr7r5vlp </ CenBandwid thPackageI d >
            </ CenBandwid thPackageI d >
        </ CenBandwid thPackageI ds >
        < CenId > cen - mkljagz6au hbzo7ayx </ CenId >
        < Name > jzwen_cros saccount_0 1 </ Name >
        < Status > Active </ Status >
    </ Cen >
</ Cens >
< PageNumber > 1 </ PageNumber >
< PageSize > 10 </ PageSize >
< RequestId > 145F96AB - 3EE9 - 4DCA - 991C - 726F96CC57 03 </
RequestId >
< TotalCount > 4 </ TotalCount >
</ DescribeCe nsResponse >

```

• JSON format

```

{
  " PageNumber ": 1 ,
  " Cens ": {
    " Cen ": [
      {
        " Name ": " jzwen_0207 _01 ",
        " Status ": " Active ",
        " Descriptio n ": " jzwe 0207 ",
        " CenBandwid thPackageI ds ": {
          " CenBandwid thPackageI d ": [
            " cenbwp - oq2ehpxq4z hwp790l7 ",
            " cenbwp - 18qmj0bahl 3yskktho "
          ]
        }
      },
      " CenId ": " cen - kojok19x3j 0q6kx5qf "
    ],
    {
      " Name ": " jzwen_cros saccount_0 1 ",
      " Status ": " Active ",
      " CenBandwid thPackageI ds ": {
        " CenBandwid thPackageI d ": [
          " cenbwp - 3o2zy4s6ji g88pn325 ",
          " cenbwp - hq2ad760ht rr7r5vlp "
        ]
      }
    },
    " CenId ": " cen - mkljagz6au hbzo7ayx "
  }
],
" TotalCount ": 4 ,
" PageSize ": 10 ,
" RequestId ": " 145F96AB - 3EE9 - 4DCA - 991C - 726F96CC57 03 "

```

}

7.4 DeleteCen

Delete a CEN instance.

Request parameters

| Name | Type | Required | Description |
|--------|--------|----------|--|
| Action | String | Yes | The action to perform. Valid value: DeleteCen |
| CenId | String | Yes | The ID of the CEN instance. |

Response parameters

| Name | Type | Description |
|-----------|--------|------------------------|
| RequestId | String | The ID of the request. |

Examples

Request example

```
https://cn-north-1.aliyuncs.com/?Action=DeleteCen
&CenId=cen-04sgjpvkc062ahzd26
&CommonParameters
```

Response example

- XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DeleteCenResponse>
  <RequestId>5903EE99-D542-4E14-BC65-AAC1CB2D3D03</
  RequestId>
</DeleteCenResponse>
```

- JSON format

```
" RequestId ":" 5903EE99 - D542 - 4E14 - BC65 - AAC1CB2D3D 03 "
```

7.5 AttachCenChildInstance

Attach a network (VPC or VBR) to a CEN instance. The attached networks (VPC or VBR) can communicate with each other.

Request parameters

| Name | Type | Required | Description |
|-----------------------|--------|----------|---|
| Action | String | Yes | The action to perform. Valid value: AttachCenChildInstance |
| CenId | String | Yes | The ID of the CEN instance. |
| ChildInstanceId | String | Yes | The ID of the network to attach. |
| ChildInstanceType | String | Yes | The type of the network to attach. |
| ChildInstanceRegionId | String | Yes | The ID of the region where the network is located. The ID of the region where the network is located. |
| ChildInstanceOwnerId | LONG | No | The account ID to which the network belongs. |

Response parameters

| Name | Type | Description |
|-----------|--------|------------------------|
| RequestId | String | The ID of the request. |

Examples

Request example

```
https://cn-beijing.aliyuncs.com/?Action=AttachCenChildInstance
&CenId=vpc-hp3kz27b1u-v9hsmm9vqi-v
&ChildInstanceId=vpc-2zekilet77-fssihllb9s-7
&ChildInstanceRegionId=cn-beijing
&ChildInstanceType=vpc
&CommonParameters
```

Response example

- XML format

```
<? xml version =" 1 . 0 " encoding =" UTF - 8 "? >
< AttachCenC hildInstan ceResponse >
  < RequestId > A278B8A6 - A5B8 - 4FDE - 9F70 - 95F0F6A1D6 8A </
  RequestId >
</ AttachCenC hildInstan ceResponse >
```

- JSON format

```
" RequestId ":" A278B8A6 - A5B8 - 4FDE - 9F70 - 95F0F6A1D6 8A "
```

7.6 DescribeCenAttachedChildInstanceAttribute

Query the detailed information of networks (VPC, VBR, CCN) attached to the CEN instance.

Request parameters

| Name | Type | Required | Description |
|-----------------------|--------|----------|--|
| Action | String | Yes | The action to perform. Valid value: DescribeCenAttachedChildInstances |
| CenId | String | Yes | The ID of the CEN instance. |
| ChildInstanceRegionId | String | Yes | The region ID of the attached network. |
| ChildInstanceId | String | Yes | The ID of the attached network to query. |
| ChildInstanceType | String | Yes | The type of the attached network. |

Response parameters

| Name | Type | Description |
|-----------------|--------|-----------------------------|
| RequestId | String | The ID of the request. |
| CenId | String | The ID of the CEN instance. |
| ChildInstanceId | String | The ID of the network. |

| Name | Type | Description |
|-------------------------|--------|---|
| ChildInstanceType | String | The type of the network. |
| ChildInstanceRegionId | String | The region ID of the network. |
| ChildInstanceOwnerId | String | The ID of the user to whom the network belongs. |
| Status | String | The attaching status of the network. |
| ChildInstanceAttachTime | String | The time when the network was attached. |
| ChildInstanceName | String | The name of the network. |

Examples

Request example

```
http://cen.aliyuncs.com/?Action=DescribeCenAttachedChildInstanceAttribute
&ChildInstanceRegionId=cn-hangzhou-test-306
&CenId=cn-3cub0ges01xvmefma
&ChildInstanceType=VPC
&ChildInstanceId=vpc-sa17uy0itv-gxiq9gbmiju
&CommonParameters
```

Response example

- XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DescribeCenAttachedChildInstanceAttribute>
  <Status>Attached</Status>
  <ChildInstanceOwnerId>1196226963299553</ChildInstanceOwnerId>
  <ChildInstanceId>vpc-2zebdboka7d7t37vo2i7n</ChildInstanceId>
  <RequestId>ADD98358-D265-4060-87CB-A2427F5A8944</RequestId>
  <ChildInstanceName>defaultvpc</ChildInstanceName>
  <ChildInstanceRegionId>cn-beijing</ChildInstanceRegionId>
  <CenId>cn-5mv960yjhja0dh7qsb</CenId>
  <ChildInstanceAttachTime>2018-07-30T07:53Z</ChildInstanceAttachTime>
  <ChildInstanceType>VPC</ChildInstanceType>
```



```
</ DescribeCenAttachedChildInstances >
```

- JSON format

```
{
  "Status": "Attached",
  "ChildInstanceOwnerId": "1196226963299553",
  "ChildInstanceId": "vpc-2zebdboka7d7t37vo2i7n",
  "RequestId": "ADD98358-D265-4060-87CB-A2427F5A8944",
  "ChildInstanceName": "defaultvpc",
  "ChildInstanceRegionId": "cn-beijing",
  "CenId": "cen-5mv960yjhja0dh7qsb",
  "ChildInstanceAttachTime": "2018-07-30T07:53Z",
  "ChildInstanceType": "VPC"
}
```

7.7 DescribeCenAttachedChildInstances

Query the networks attached to a CEN instance.

Request parameters

| Name | Type | Required | Description |
|-----------------------|---------|----------|--|
| Action | String | Yes | The action to perform. Valid value: DescribeCenAttachedChildInstances |
| CenId | String | Yes | The ID of the CEN instance. |
| ChildInstanceType | String | No | The type of the network instance. Valid value: VPC VBR CCN . |
| ChildInstanceRegionId | String | No | The region ID of the attached network. |
| PageNumber | Integer | No | The number of pages to return. The default value is 1 . |
| PageSize | Integer | No | The number of rows per page. The maximum value is 50 and the default value is 10 . |

Response parameters

| Name | Type | Description |
|----------------|---------|--|
| RequestId | String | The ID of the request. |
| TotalCount | String | The number of queried entries. |
| PageNumber | Integer | The current page number. |
| PageSize | String | The number of entries on the current page. |
| ChildInstances | List | A list of the attached networks. |

Table 7-2: ChildInstances

| Name | Type | Description |
|-----------------------|--------|---|
| CenId | String | The ID of the CEN instance. |
| ChildInstanceId | String | The ID of the network. |
| ChildInstanceType | String | The type of the network. |
| ChildInstanceRegionId | String | The ID of the region where the network is located. |
| Status | Status | The status of the network: attaching , attached , and detaching . |
| ChildInstanceOwnerId | Long | The account ID to which the network belongs. |

Examples

Request example

```
https://cnb.aliyuncs.com/?Action=DescribeCenAttachedChildInstances
&CenId=cen-kjok19x3j0q6kx
&CommonParameters
```

Response example

• XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DescribeCenAttachedChildInstancesResponse>
```

```

    < ChildInsta nces < ChildInsta nce >
      < CenId > cen - kojok19x3j 0q6kx5qf </ CenId >
      < ChildInsta nceId > vpc - hp3kz27b1u v9hsmm9vqi v </
ChildInsta nceId >
      < ChildInsta nceOwnerId > 1894573272 82 ****</
ChildInsta nceOwnerId >
      < ChildInsta nceRegionI d > cn - huhehaote </
ChildInsta nceRegionI d >
      < ChildInsta nceType > VPC </ ChildInsta nceType >
      < Status > Attached </ Satus >
    </ ChildInsta nce >
    < ChildInsta nce >
      < CenId > cen - kojok19x3j 0q6kx5qf </ CenId >
      < ChildInsta nceId > vpc - gw85r5kr8u rw957szm45 5 </
ChildInsta nceId >
      < ChildInsta nceOwnerId > 1894573272 82 ****</
ChildInsta nceOwnerId >
      < ChildInsta nceRegionI d > eu - central - 1 </
ChildInsta nceRegionI d >
      < ChildInsta nceType > VPC </ ChildInsta nceType >
      < Status > Atatched </ Status >
    </ ChildInsta nce >
  </ ChildInsta nces >
  < PageNumber > 1 </ PageNumber >
  < PageSize > 10 </ PageSize >
  < RequestId > 50F8E0AB - A225 - 41C0 - AC88 - FFB51A4F5C 72 </
RequestId >
  < TotalCount > 3 </ TotalCount >
</ DescribeCe nAttachedC hildInstan cesRespons e >

```

- JSON format

```

{
  " PageNumber ": 1 ,
  " ChildInsta nces ":{
    " ChildInsta nce ":[
      {
        " Status ":" Attached ",
        " ChildInsta nceOwnerId ":" 1894573272 82 ****",
        " ChildInsta nceId ":" vpc - hp3kz27b1u v9hsmm9vqi v
",
        " ChildInsta nceRegionI d ":" cn - huhehaote ",
        " CenId ":" cen - kojok19x3j 0q6kx5qf ",
        " ChildInsta nceType ":" VPC "
      },
      {
        " Status ":" Attached ",
        " ChildInsta nceOwnerId ":" 1894573272 82 ****",
        " ChildInsta nceId ":" vpc - gw85r5kr8u rw957szm45 5
",
        " ChildInsta nceRegionI d ":" eu - central - 1 ",
        " CenId ":" cen - kojok19x3j 0q6kx5qf ",
        " ChildInsta nceType ":" VPC "
      }
    ]
  },
  " TotalCount ": 3 ,
  " PageSize ": 10 ,
  " RequestId ":" 50F8E0AB - A225 - 41C0 - AC88 - FFB51A4F5C 72 "
}

```

}

7.8 DetachCenChildInstance

Detach a specified network from a CEN instance.

Request parameters

| Name | Type | Required | Description |
|-----------------------|--------|----------|---|
| Action | String | Required | The action to perform. Valid value: DetachCenChildInstance |
| CenId | String | Required | The ID of the CEN instance. |
| Childinstanceid | String | Yes | The ID of the network to attach. |
| ChildInstanceType | String | Required | The type of the network to attach. |
| ChildInstanceRegionId | String | Required | The ID of the region where the network is located. |
| ChildInstanceOwnerId | Long | No | The account ID to which the network belongs. |
| CenOwnerId | Long | No | The account ID to which the CEN instance belongs. |

Response parameters

| Name | Type | Required |
|-----------|--------|------------------------|
| RequestId | String | The ID of the request. |

Examples

Request example

```
https://cnb.aliyuncs.com/?Action=DetachCenChildInstance
&CenId=vpc-hp3kz27b1uv9hsmm9vqi v
&ChildInstanceid=vpc-2zekilet77fssihllb9s7
&ChildInstanceRegionId=cn-beijing
&ChildInstanceType=vpc
```

& CommonParameters

Response example

- XML format

```
<? xml version="1.0" encoding="UTF-8" ? >
<DetachCenC hildInstanceResponse >
  <RequestId > 5903EE99 - D542 - 4E14 - BC65 - AAC1CB2D3D 03 </
  RequestId >
</DetachCenC hildInstanceResponse >
```

- JSON format

```
{
  "RequestId": "0C2EE7A8 - 74D4 - 4081 - 8236 - CEBDE3BBCF 50"
}
```

7.9 DescribeGrantRulesToCen

Query the networks that have been authorized to CEN.



Note:

This API is an API of VPC. Therefore, the endpoint of the API is `vpc.aliyuncs.com` and the API version is 2016-04-28.

Request parameters

| Name | Type | Required | Description |
|--------------|--------|----------|---|
| Action | String | Yes | The action to perform. Valid value: DescribeGrantRulesToCen |
| RegionId | String | Yes | The ID of the region where the network is located. |
| InstanceId | String | Yes | The ID of the network. |
| InstanceType | String | Yes | The type of the network. Valid value: VPC VBR |

Response parameters

| Name | Type | Description |
|------------|--------|--------------------------------|
| RequestId | String | The ID of the request. |
| TotalCount | String | The number of queried entries. |

| Name | Type | Description |
|---------------|---------|--|
| PageNumber | Integer | The current page number. |
| PageSize | String | The number of entries on the current page. |
| CenGrantRules | List | A list of the authorized networks. |

Table 7-3: CenGrantRule

| Name | Type | Description |
|---------------|--------|--|
| CenInstanceId | String | The ID of the CEN instance. |
| CenOwnerId | String | The account ID that the network belongs to. |
| CreationTime | String | The time at which the network instance is authorized in the format of YYYY-MM-DDThh:mmZ. |

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DescribeGrantRulesToCen
&InstanceId=vpc-o6wvsp5lcf4b5kdcytm
&RegionId=cn-hangzhou-test-306
&InstanceType=VPC
&CommonParameters
```

Response example

- XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DescribeGrantRulesToCenResponse>
  <TotalCount>1</TotalCount>
  <PageNumber>1</PageNumber>
  <CbnGrantRules>
    <CbnGrantRule>
      <CbnInstanceId>cbn-6ugox0vl0zff4gl0b8</CbnInstanceId>
      <CbnOwnerId>101664776284****</CbnOwnerId>
      <CreationTime>2018-01-18T11:49:09Z</CreationTime>
    </CbnGrantRule>
  </CbnGrantRules>
  <PageSize>10</PageSize>
  <RequestId>330714D1-F335-4CE2-9D29-F54445937387</RequestId>
```

```
</ DescribeGrantRulesTo CenResponse >
```

- JSON format

```
{
  " TotalCount ": 1 ,
  " PageNumber ": 1 ,
  " CbnGrantRules ": {
    " CbnGrantRule ": [
      {
        " CbnInstanceId ": " cbn - 6ugox0vl0z ff4gl0b8 ",
        " CbnOwnerId ": 1016647762 84 ****,
        " CreationTime ": " 2018 - 01 - 18T11 : 49 : 09Z "
      }
    ]
  },
  " PageSize ": 10 ,
  " RequestId ": " 330714D1 - F335 - 4CE2 - 9D29 - F544459373 87 "
}
```

7.10 GrantInstanceToCen

Authorize CEN to attach the network that belongs to another account.



Note:

This API is an API of VPC. Therefore, the endpoint of the API is `vpc.aliyuncs.com` and the API version is 2016-04-28.

Request parameters

| Name | Type | Required | Description |
|--------------|--------|----------|---|
| Action | String | Yes | The action to perform. Valid value: GrantInstanceToCen |
| RegionId | String | Yes | The ID of the region where the network is located. |
| InstanceId | String | Yes | The ID of the network to authorize. |
| InstanceType | String | Yes | The type of the network. Valid value: VPC VBR |
| CenId | String | Yes | The ID of the CEN instance to which the network is attached. |
| CenOwnerId | String | Yes | The account ID of the CEN instance to which the authorized network is attached. |

| Name | Type | Required | Description |
|-------------|--------|----------|--|
| ClientToken | String | No | <p>A client token used to ensure the idempotence of requests.</p> <p>This parameter value is generated by the client and must be unique among different requests. The maximum length is 64 ASCII characters.</p> |

Response parameters

| Name | Type | Description |
|-----------|--------|------------------------|
| RequestId | String | The ID of the request. |

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=GrantInstanceToCen
&CenId=cen-wvzs8ujf-fj95hi4
&CenOwnerId=1086496381*****
&InstanceId=vpc-t4nsmy2lsk-kven1nfawzg
&RegionId=ap-southeast-1
&InstanceType=VPC
&CommonParameters
```

Response example

- XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<GrantInstanceToCenResponse>
  <RequestId>0C2EE7A8-74D4-4081-8236-CEBDE3BBCF50</RequestId>
</GrantInstanceToCenResponse>
```

- JSON format

```
{
  "RequestId": "0C2EE7A8-74D4-4081-8236-CEBDE3BBCF50"
}
```

7.11 RevokeInstanceFromCen

Cancel the authorization of a network to a CEN instance.



Note:

This API is an API of VPC. Therefore, the endpoint of the API is `vpc.aliyuncs.com`. API version is 2016-04-28.

Request parameters

| Parameter | Type | Required | Description |
|--------------|--------|----------|---|
| Action | String | Yes | The action to perform. Valid value: <code>RevokeInstanceFromCen</code> |
| RegionId | String | Yes | The ID of the region where the network is located. |
| InstanceId | String | Yes | The ID of the network to cancel the authorization. |
| InstanceType | String | Yes | The type of the network instance. |
| CenId | String | Yes | The ID of the CEN instance. |
| CenOwnerId | String | Yes | The account ID of the CEN instance. |
| ClientToken | String | No | A client token used to ensure the idempotence of requests. This parameter value is generated by the client and must be unique among different requests. The maximum length is 64 ASCII characters. |

Response parameters

| Name | Type | Description |
|-----------|--------|------------------------|
| RequestId | String | The ID of the request. |

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=RevokeInstanceFromCen
&CenId=cbn-6ugox0vl0z-ff4gl0b8
&CenOwnerId=1016647762-84****
&InstanceId=vpc-o6wcsp5lcf4b5kdcytm
&RegionId=cn-hangzhou-test-306
&InstanceType=VPC
&CommonParameters
```

Response example

- **XML format**

```
<? xml version =" 1 . 0 " encoding =" UTF - 8 "? >  
< RevokeInst anceFromCe nResponse >  
  < RequestId > 0C2EE7A8 - 74D4 - 4081 - 8236 - CEBDE3BBCF 50 </  
  RequestId >  
</ RevokeInst anceFromCe nResponse >
```

- **JSON format**

```
" RequestId ":" 0C2EE7A8 - 74D4 - 4081 - 8236 - CEBDE3BBCF 50 "
```

8 Bandwidth packages

8.1 CreateCenBandwidthPackage

Creates a bandwidth package.

Before you connect the networks that are associated with a CEN instance and belong to different regions, you need to create a bandwidth package based on the area of these networks.

Note

An area is a collection of Alibaba Cloud regions. Areas in CEN include Mainland China , Asia Pacific, North America, and Europe. The relationship between a region and an area is as follows:


| Area | Included regions |
|----------------|--|
| Mainland China | China (Qingdao), China (Beijing), China (Zhangjiakou), China (Shenzhen), China (Hangzhou), China (Shanghai), China (Hohhot) |
| North America | US (Silicon Valley), US (Virginia) |
| Asia Pacific | China (Hong Kong), Singapore, Malaysia (Kuala Lumpur), Japan (Tokyo), India (Mumbai), Indonesia (Jakarta) |
| Europe | Germany (Frankfurt), UK (London) |
| Australia | Australia (Sydney) |

Debug

[Use OpenAPI Explorer to perform debug operations and generate SDK code examples.](#)

Request parameters

| Parameter | Type | Required ? | Example value | Description |
|----------------------|---------|------------|-------------------------------------|---|
| Bandwidth | Integer | Yes | 2 | The bandwidth of the bandwidth package to be created. Unit: Mbit/s. Minimum value: 2. |
| Geographic RegionAId | String | Yes | China | The area of the networks. Valid values: China North-America Asia-Pacific Europe Australia |
| Geographic RegionBId | String | Yes | China | The area of the networks. Valid values: China North-America Asia-Pacific Europe Australia |
| Action | String | No | CreateCenBandwidthPackage | Optional. The name of this action. Value: AssociateCenBandwidthPackage |
| ClientToken | String | No | SSJFLAFHHFHFF-SJSJJFBWHHE-SHHFJJDBD | Optional. The client token used to guarantee the idempotence of the request. The value of this parameter is generated by the client. The value is unique among different requests and 1 to 64 ASCII characters in length. |

| Parameter | Type | Required ? | Example value | Description |
|----------------------------|---------|------------|--------------------|---|
| Name | String | No | cen | Optional. The name of the bandwidth package. The name must be 2 to 128 characters in length and can contain letters, numbers, periods (.), underscores (_), and hyphens (-). The name must start with a letter or a Chinese character. It cannot start with <code>http://</code> or <code>https://</code> . |
| Description | String | No | Bandwidth packages | Optional. The description of the bandwidth package. |
| BandwidthPackageChargeType | String | No | PREPAY | Optional. The billing method of the bandwidth package. Valid values: <ul style="list-style-type: none"> POSTPAY: Pay-As-You-Go PREPAY: Subscription <div style="background-color: #f0f0f0; padding: 5px; border: 1px solid #ccc;">  Note: Only the Subscription billing method is supported by the international site. </div> |
| Period | Integer | No | 1 | Optional. The purchase period in the case of Subscription. Default value: 1 |

| Parameter | Type | Required ? | Example value | Description |
|--------------|---------|------------|---------------|--|
| PricingCycle | String | No | Month | Optional. The billing cycle in the case of Subscription. Valid values: <ul style="list-style-type: none"> Month (default): billing on a monthly basis Year: billing on a yearly basis |
| AutoPay | Boolean | No | true | Optional. Indicates whether to pay the bill automatically. Valid values: <ul style="list-style-type: none"> true: Pay automatically. false (default): Do not pay the bill automatically. |

Response parameters

| Parameter | Type | Example value | Description |
|----------------------------|--------|--------------------------------------|--|
| CenBandwidthPackageId | String | cenbwp-4c2zaavbv5fx**** | The ID of the created bandwidth package. |
| CenBandwidthPackageOrderId | String | 201564200040390 | The order ID of the bandwidth package. |
| RequestId | String | 6547D2DA-4383-46A0-9E39-BA324492AD9F | The request ID. |

Examples

Request example

```
http ( s ) : / / [ Endpoint ] / ? Action = CreateCenBandwidthPackage
& Bandwidth = 2
& Geographic RegionAId = China
& Geographic RegionBId = China
& < CommonParameters >
```

Response examples

XML format

```
< CreateCenB andwidthPa ckageRespo nse >
  < RequestId > E4B345CD - 2CBA - 4881 - AF6D - E5D9BAE1CA 7B </
  RequestId >
  < CenBandwid thPackage0 rderId > 2015642000 40390 </
  CenBandwid thPackage0 rderId >
  < CenBandwid thPackageI d > Cenbwp - stb2axpqzz ko2j ****</
  CenBandwid thPackageI d >
</ CreateCenB andwidthPa ckageRespo nse >
```

JSON format

```
{
  " CenBandwid thPackage0 rderId ":" 2015642000 40390 ",
  " RequestId ":" E4B345CD - 2CBA - 4881 - AF6D - E5D9BAE1CA 7B ",
  " CenBandwid thPackageI d ":" Cenbwp - stb2axpqzz ko2j ****"
}
```

Errors

| HTTP status code | Error code | Error message | Description |
|------------------|------------------------|-----------------------------------|--|
| 400 | Unsupported.ChargeType | The charge type is not supported. | The specified billing method is not supported. |

For a list of error codes, visit the [API Error Center](#).

8.2 AssociateCenBandwidthPackage

Associates a bandwidth package with a CEN instance.

Debug

[Use OpenAPI Explorer to perform debug operations and generate SDK code examples.](#)

Request parameters

| Parameter | Type | Required ? | Example value | Description |
|-------------------------|--------|------------|-------------------------|----------------------------------|
| CenBandwid thPackageI d | String | Yes | Cenbwp-4c2zaavbv5fx**** | The ID of the bandwidth package. |
| CenId | String | Yes | cen-7qthudw0ll6jmc**** | The ID of the CEN instance. |

| Parameter | Type | Required ? | Example value | Description |
|-----------|--------|------------|---------------------------------------|--|
| Action | String | No | AssociateC enBandwidth hPackage | Optional. The name of this action. Value: AssociateC enBandwidthPackage |

Response parameters

| Parameter | Type | Example value | Description |
|-----------|--------|--|------------------------|
| RequestId | String | 0C2EE7A8-74D4 -4081-8236- CEBDE3BBCF50 | The ID of the request. |

Examples

Request example

```
http ( s )://[ Endpoint ]/? Action = AssociateC enBandwidth
hPackage
& CenBandwidthPackageId = cenbwp - 4c2zaavbv 5fx ****
& CenId = cen - 7qthudw0ll 6jmc ****
&< CommonParameters >
```

Response examples

XML format

```
< AssociateC enBandwidth hPackageResponse >
  < RequestId > 5903EE99 - D542 - 4E14 - BC65 - AAC1CB2D3D 03 </
  RequestId >
</ AssociateC enBandwidth hPackageResponse >
```

JSON format

```
{
  " RequestId ":" 0C2EE7A8 - 74D4 - 4081 - 8236 - CEBDE3BBCF 50 "
}
```

Errors

For a list of error codes, visit the [API Error Center](#).

8.3 UnassociateCenBandwidthPackage

Unbind a bandwidth package from a CEN instance. You can bind the bandwidth package to another CEN instance after it is unbounded.

Request parameters

| Name | Type | Required | Description |
|-----------------------|--------|----------|--|
| Action | String | Yes | The action to perform: Valid value: UnassociateCenBandwidthPackage |
| CenId | String | Yes | The ID of the CEN instance. |
| CenBandwidthPackageId | String | Yes | The ID of the bandwidth package. |

Response parameters

| Name | Type | Description |
|-----------|--------|------------------------|
| RequestId | String | The ID of the request. |

Examples

Request example

```
https://cbn.aliyuncs.com/?Action=UnassociateCenBandwidthPackage
&CenId=cen-04sgjpvkc062ahzd26
&CenBandwidthPackageId=Cenbwp-stb2axpqzzko2ja
&CommonParameters
```

Response example

- XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<UnassociateCenBandwidthPackageResponse>
  <RequestId>5903EE99-D542-4E14-BC65-AAC1CB2D3D03</RequestId>
</UnassociateCenBandwidthPackageResponse>
```

- JSON format

```
{
  "RequestId": "0C2EE7A8-74D4-4081-8236-CEBDE3BBCF50"
```

}

8.4 DescribeCenBandwidthPackages

Query all bandwidth packages under an account.

Request parameters

| Name | Type | Required | Description |
|------------------|--------|----------|--|
| Action | String | Yes | The action to perform. Valid value: <code>DescribeCenBandwidthPackages</code> |
| Filter . n . Key | String | No | <p>Filter keys. Up to five filter keys are supported. The valid value of <code>n</code> is [1,5].</p> <p>You can provide multiple values for each filter key. The multiple values are of the "or" relation, that is, the filtering key is met as long as one value is met.</p> <p>The filter keys are of the "and" relation, that is, a result is found only when all filtering keys are met.</p> <p>The following filter conditions are supported:</p> <ul style="list-style-type: none"> · <code>CenId</code> (the ID of the CEN instance), <code>Status</code> (The status of the bandwidth package, <code>Idle/ InUse</code>), <code>CenBandwidthPackageId</code> (the ID of bandwidth package) <code>Name</code> (the name of the bandwidth package) · <code>CenId</code> : The ID of the CEN instance. · <code>Status</code> : The status of the bandwidth package (<code>Idle/ InUse</code>). · <code>CenBandwidthPackageId</code> : The ID of the bandwidth package. · <code>Name</code> : The name of the bandwidth package. |

| Name | Type | Required | Description |
|------------------------|---------|----------|--|
| Filter . n . Value . m | String | No | The value of the corresponding filter key. The valid value of m is [1, 5]. |
| PageNumber | Integer | No | The number of pages to return. The default value is 1 . |
| PageSize | Integer | No | The number of rows per page. The maximum value is 50 and the default value is 10 . |

Response parameters

| Name | Type | Description |
|----------------------|---------|--|
| RequestId | String | The ID of the request. |
| TotalCount | String | The number of queried entries. |
| PageNumber | Integer | The current page number. |
| PageSize | String | The number of entries on the current page. |
| CenBandwidthPackages | List | A list of bandwidth packages. |

Table 8-1: CenBandwidthPackage

| Name | Type | Description |
|-----------------------|---------|--|
| CenBandwidthPackageId | String | The ID of the bandwidth package. |
| CenIds | List | A list of CEN instances corresponding to the bandwidth package. |
| Name | String | The name of the bandwidth package. |
| BusinessStatus | String | The billing status of the bandwidth package, including Normal , FinancialLocked , and SecurityLocked . |
| Status | String | The status of the bandwidth package in the CEN instance, including Idle and InUse . |
| Bandwidth | Integer | The peak bandwidth of the bandwidth package. |

| Name | Type | Description |
|----------------------------|--------|---|
| CreationTime | String | The time when the bandwidth package was created in the format of YYYY-MM-DDThh:mmZ. |
| BandwidthPackageChargeType | String | The billing method of the bandwidth package, including POSTPAY and PREPAY . |
| GeographicRegionAId | String | The interconnected area A associated with the bandwidth package. |
| GeographicRegionBId | String | The interconnected area B associated with the bandwidth package. |

Examples

Request example

```
https://cn-bp.aliyuncs.com/?Action=DescribeCenBandwidthPackage&CommonParameters
```

Response example

- XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DescribeCenBandwidthPackageResponse>
  <PageNumber>1</PageNumber>
  <TotalCount>1</TotalCount>
  <PageSize>10</PageSize>
  <RequestId>9D7E2400-2755-4AF5-9B73-12565E4F73A0</RequestId>
  <CenBandwidthPackages>
    <CenBandwidthPackage>
      <CreationTime>2018-02-07T02:19Z</CreationTime>
      <Status>InUse</Status>
      <GeographicRegionBId>china</GeographicRegionBId>
    >
    <BusinessStatus>Normal</BusinessStatus>
    <BandwidthPackageChargeType>PREPAY</BandwidthPackageChargeType>
    <GeographicRegionAId>china</GeographicRegionAId>
  >
  <CenBandwidthPackageId>cenbwp-oq2ehpxq4zhwp790l7</CenBandwidthPackageId>
  <CenIds>
    <CenId>cen-kojok19x3j0q6kx5qf</CenId>
  </CenIds>
  <ExpiredTime>2018-03-07T16:00Z</ExpiredTime>
  <Bandwidth>1</Bandwidth>
</CenBandwidthPackage>

```

```
</ DescribeCe nBandwidth PackageRes ponse >
```

• JSON format

```
{
  " PageNumber ": 1 ,
  " TotalCount ": 5 ,
  " PageSize ": 10 ,
  " RequestId ":" 9D7E2400 - 2755 - 4AF5 - 9B73 - 12565E4F73 A0 ",
  " CenBandwid thPackages ":{
    " CenBandwid thPackage ":[
      {
        " CreationTi me ":" 2018 - 02 - 07T02 : 19Z ",
        " Status ":" InUse ",
        " Geographic RegionBI d ":" china ",
        " BusinessSt atus ":" Normal ",
        " BandwidthP ackageChar geType ":" PREPAY ",
        " Geographic RegionAI d ":" china ",
        " CenBandwid thPackageI d ":" cenbwp - oq2ehpxq4z
hwp790l7 ",
        " Cenids ":{
          " Cenid ":[
            " cen - kojok19x3j 0q6kx5qf "
          ]
        },
        " ExpiredTim e ":" 2018 - 03 - 07T16 : 00Z ",
        " Bandwidth ": 1
      }
    ]
  }
}
```

8.5 ModifyCenBandwidthPackageAttribute

Modify the name and description of a bandwidth package.

Request parameters

| Name | Type | Required | Description |
|-------------------------------|--------|----------|---|
| Action | String | Yes | The action to perform. Valid value: ModifyCenB andwidthPa ckageAttri bute |
| CenBandwid thPackageI d | String | Yes | The ID of the bandwidth package. |

| Name | Type | Required | Description |
|-------------|--------|----------|---|
| Name | String | No | The name of the bandwidth package. The name can contain [2,128] characters and numbers, underscores, and hyphens, and the name must start with English letters, but cannot start with <code>http ://</code> or <code>https ://</code> . |
| Description | String | No | The description of the bandwidth package. The description can contain [2,256] characters, numbers, underscores, and hyphens, and the name must start with English letters, but cannot start with <code>http ://</code> or <code>https ://</code> . |

Response parameters

| Name | Type | Description |
|-----------|--------|------------------------|
| RequestId | String | The ID of the request. |

Examples

Request example

```
https :// cbn . aliyuncs . com /? Action = ModifyCenB andwidthPa
ckageAttri bute
& CenBandwid thPackageI d = cenbwp - oq2ehpxq4z hwp790l7
& Name = china
& Common parameters
```

Response example

- XML format

```
<? xml version =" 1 . 0 " encoding =" UTF - 8 " ? >
< ModifyCenB andwidthPa ckageAttri buteRespon se >
  < RequestId > 5903EE99 - D542 - 4E14 - BC65 - AAC1CB2D3D 03 </
  RequestId >
</ ModifyCenB andwidthPa ckageAttri buteRespon se >
```

- JSON format

```
" RequestId ":" 13526224 - 5780 - 4426 - 8ADF - BC8B08700F 23 "
```

8.6 ModifyCenBandwidthPackageSpec

Modify the bandwidth of a bandwidth package.

Request parameters

| Name | Type | Required | Description |
|-----------------------|--------|----------|---|
| Action | String | Yes | The action to perform. Valid value: ModifyCenBandwidthPackageSpec |
| CenBandwidthPackageId | String | Yes | The ID of the bandwidth package. |
| Bandwidth | String | Yes | The bandwidth in Mbps set for the bandwidth package. The minimum value is 2 Mbps. |

Response parameters

| Name | Type | Description |
|-----------|--------|------------------------|
| RequestId | String | The ID of the request. |

Examples

Request example

```
https://cbn.aliyuncs.com/?Action=ModifyCenBandwidthPackageSpec
&CenBandwidthPackageId=cenbwp-oq2ehpxq4zhwp790l7
&Bandwidth=10
&CommonParameters
```

Response example

- XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<ModifyCenBandwidthPackageSpecResponse>
  <RequestId>5903EE99-D542-4E14-BC65-AAC1CB2D3D03</RequestId>
</ModifyCenBandwidthPackageSpecResponse>
```

- JSON format

```
" RequestId ": " 0C2EE7A8 - 74D4 - 4081 - 8236 - CEBDE3BBCF 50 "
```

8.7 DescribeCenGeographicSpanRemainingBandwidth

Queries the remaining available bandwidth of a bandwidth package.

Debug

[Use OpenAPI Explorer to perform debug operations and generate SDK code examples.](#)

Request parameters

| Parameter | Type | Required? | Example value | Description |
|---------------------|--------|-----------|---|---|
| CenId | String | Yes | cen-nh98vzx8gfhlwn**** | The ID of the CEN instance to which the bandwidth package belongs. |
| GeographicRegionAId | String | Yes | China | One area connected through the bandwidth package. Valid values: China North-America Asia-Pacific Europe Middle-East |
| GeographicRegionBId | String | Yes | North-America | The other area connected through the bandwidth package. Valid values: China North-America Asia-Pacific Europe Middle-East |
| Action | String | No | DescribeCenGeographicSpanRemainingBandwidth | Optional. The name of this action. Value: DescribeCenGeographicSpanRemainingBandwidth |

Response parameters

| Parameter | Type | Example value | Description |
|--------------------|--------|--------------------------------------|---|
| RemainingBandwidth | Long | 2 | The remaining bandwidth of the bandwidth package. |
| RequestId | String | E4B345CD-2CBA-4881-AF6D-E5D9BAE1CA7B | The ID of the request. |

Examples

Request example

```
http ( s )://[ Endpoint ]/? Action = DescribeCenGeographicSpanRemainingBandwidth
& CenId = cen - nh98vzx8gf hlwn ****
& GeographicRegionAId = China
& GeographicRegionBId = North - America
&< CommonParameters >
```

Response examples

XML format

```
< DescribeCenGeographicSpanRemainingBandwidthResponse >
  < RequestId > E4B345CD - 2CBA - 4881 - AF6D - E5D9BAE1CA 7B </
  RequestId >
  < RemainingBandwidth > 2 </ RemainingBandwidth >
</ DescribeCenGeographicSpanRemainingBandwidthResponse >
```

JSON format

```
{
  "RequestId ":" E4B345CD - 2CBA - 4881 - AF6D - E5D9BAE1CA 7B ",
  "RemainingBandwidth ":" 2 "
}
```

Errors

For a list of error codes, visit the [API Error Center](#).

8.8 DeleteCenBandwidthPackage

Deletes a bandwidth package.

Debug

[Use OpenAPI Explorer to perform debug operations and generate SDK code examples.](#)

Request parameters

| Parameter | Type | Required? | Example value | Description |
|-----------------------|--------|-----------|---------------------------|---|
| CenBandwidthPackageId | String | Yes | cenbwp-4c2zaavbvh5f42**** | The ID of the bandwidth package to be deleted. |
| Action | String | No | DeleteCenBandwidthPackage | Optional. The name of this action. Value: DeleteCenBandwidthPackage |

Response parameters

| Parameter | Type | Example value | Description |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | C0245BEF-52AC-44A8-A776-EF96FD26A5CA | The ID of the request. |

Examples

Request example

```
http ( s )://[ Endpoint ]/? Action = DeleteCenBandwidthPackage & CenBandwidthPackageId = cenbwp - 4c2zaavbvh 5f42 **** &< CommonParameters >
```

Response examples

XML format

```
< DeleteCenBandwidthPackageResponse >
  < RequestId > 13526224 - 5780 - 4426 - 8BDF - BC8B08700F 22 </
  RequestId >
</ DeleteCenBandwidthPackageResponse >
```

JSON format

```
{
  " RequestId ":" C0245BEF - 52AC - 44A8 - A776 - EF96FD26A5 CA "
```

```
}
```

Errors

| HTTP status code | Error code | Error message | Description |
|------------------|-----------------------|--|---|
| 403 | Forbidden. Release | Forbidden to release a PREPAY bandwidth instance within validity period. | Deletion of Subscription bandwidth packages is not allowed. |

For a list of error codes, visit the [API Error Center](#).

9 Cross-region interconnection bandwidth

9.1 SetCenInterRegionBandwidthLimit

Configure the cross-regional interconnection bandwidth. Ensure that you have added the interconnection regions to the CEN instance before configuring the bandwidth.

Request parameters

| Name | Type | Required | Description |
|------------------|--------|----------|--|
| Action | String | Yes | The action to perform. Valid value: SetCenInterRegionBandwidthLimit |
| CenId | String | Yes | The ID of the CEN instance. |
| LocalRegionId | String | Yes | The ID of the local region. |
| OppositeRegionId | String | Yes | The ID of the other interconnected region. |
| BandwidthLimit | Long | Yes | The bandwidth configured for the interconnected regions communication. |

Response parameters

| Name | Type | Description |
|-----------|--------|------------------------|
| RequestId | String | The ID of the request. |

Examples

Request example

```
https://cn.aliyuncs.com/?Action=SetCenInterRegionBandwidthLimit
&CenId=cen-mkljagz6au-hbzo7ayx
&LocalRegionId=cn-beijing
&OppositeRegionId=cn-shenzhen
&BandwidthLimit=1
&CommonParameters
```

Response example

- XML format

```
<? xml version =" 1 . 0 " encoding =" UTF - 8 "? >
< SetCenInte rRegionBan dwidthLimi tResponse >
  < RequestId > 530BC816 - F575 - 412A - AAB2 - 435125D263 28 </
  RequestId >
</ SetCenInte rRegionBan dwidthLimi tResponse >
```

- JSON format

```
" RequestId ":" 530BC816 - F575 - 412A - AAB2 - 435125D263 28 ",
```

9.2 DescribeCenInterRegionBandwidthLimits

Query the cross-regional interconnection bandwidths set for different regions.

Request parameters

| Name | Type | Required | Description |
|------------|---------|----------|--|
| Action | String | Yes | The action to perform. Valid value: DescribeCenInterRegionBandwidthLimits |
| CenId | String | No | The ID of the CEN instance. |
| PageNumber | Integer | No | The number of pages to return. The default value is 1 . |
| PageSize | Integer | No | The number of rows per page. The maximum value is 50 and the default value is 10 . |

Response parameters

| Name | Type | Description |
|------------|---------|--|
| RequestId | String | The ID of the request. |
| TotalCount | String | The number of queried entries. |
| PageNumber | Integer | The current page number. |
| PageSize | String | The number of entries on the current page. |

| Name | Type | Description |
|-------------------------------|------|----------------------------------|
| CenInterRegionBandwidthLimits | List | A list of configured bandwidths. |

Table 9-1: CenInterRegionBandwidthLimit

| Name | Type | Description |
|------------------|--------|--|
| CenId | String | The ID of the CEN instance. |
| LocalRegionId | String | The ID of the local region. |
| OppositeRegionId | String | The ID of the peer region. |
| Status | String | The status of the cross-regional interconnection bandwidth, including Active and Modifying . |
| BandwidthLimit | Long | The cross-regional interconnection bandwidth set for the two regions. |

Examples

Request example

```
https://cn-north-1.aliyuncs.com/?Action=DescribeCenInterRegionBandwidthLimits
&CommonParameters
```

Response example

- XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DescribeCenInterRegionBandwidthLimitsResponse>
  <CenInterRegionBandwidthLimits>
    <CenInterRegionBandwidthLimit>
      <Status>Active</Status>
      <LocalRegionId>cn-hangzhou-667</LocalRegionId>
      <CenId>Cen-to55jjgdq4pfvby3d</CenId>
      <OppositeRegionId>cn-hangzhou-668</OppositeRegionId>
      <BandwidthLimit>1000</BandwidthLimit>
    </CenInterRegionBandwidthLimit>
  </CenInterRegionBandwidthLimits>
  <PageNumber>1</PageNumber>
  <TotalCount>1</TotalCount>
  <PageSize>10</PageSize>
  <RequestId>C4CF2E97-5C04-4A9E-B908-BE95FF68C7B2</RequestId>
```

```
</ DescribeCe nInterRe gionBandwidt hLimitsRes ponse >
```

- JSON format

```
" CenInterRe gionBandwi dthLimits ":{
  " CenInterRe gionBandwi dthLimit ":[
    {
      Status ":" Active ",
      LocalRegio nId ":" cn - hangzhou - 667 ",
      CenId ":" Cen - to55jjgdqd 4pfvby3d ",
      OppositeRe gionId ":" cn - hangzhou - 668 ",
      BandwidthL imit ": 1000
    }
  ]
}

" PageNumber ": 1 ,
" TotalCount ": 1 ,
" PageSize ": 10 ,
" RequestId ":" 187507F9 - D955 - 41A5 - 98EB - 7E4471F9D8 E7 "
```

9.3 DescribeGeographicRegionMembership

Query regions in a specified area.

Request parameters

| Name | Type | Required | Description |
|------------------------|---------|----------|---|
| Action | String | Yes | The action to perform. Valid value: DescribeGe ographicRe gionMember ship |
| Geographic RegionId | String | Yes | The ID of the specified area. Valid value: <ul style="list-style-type: none"> • china • asia - pacific • europe • australia • north - america |
| PageNumber | Integer | No | The number of pages to return. The default value is 1 . |
| PageSize | Integer | No | The number of rows per page. The maximum value is 50 and the default value is 10 . |

Response parameters

| Name | Type | Description |
|------------|---------|--|
| RequestId | String | The ID of the request. |
| TotalCount | String | The number of queried entries. |
| PageNumber | Integer | The current page number. |
| PageSize | String | The number of entries contained on the current page. |
| RegionIds | List | A list of regions in the specified area. |

Examples**Request example**

```
https://cn-north-1.aliyuncs.com/?Action=DescribeGeographicRegionMemberships
&GeographicRegionId=north-america
&CommonParameters
```

Response example

• XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DescribeGeographicRegionMembershipsResponse>
  <PageNumber>1</PageNumber>
  <PageSize>10</PageSize>
  <RegionIds>
    <RegionId>
      <RegionId>us-west-1</RegionId>
    </RegionId>
    <RegionId>
      <RegionId>us-east-1</RegionId>
    </RegionId>
  </RegionIds>
  <RequestId>DC9EB0C9-60AF-4A09-A36C-608F70130274</RequestId>
  <TotalCount>2</TotalCount>
  <TotalCount>6</TotalCount>
</DescribeGeographicRegionMembershipsResponse>
```

• JSON format

```
{
  "RegionIds":{
    "RegionId":[
      {
        "RegionId":"us-west-1"
      },
      {
        "RegionId":"us-east-1"
      }
    ]
  }
}
```



```
} ,  
" PageNumber ": 1 ,  
" TotalCount ": 2 ,  
" PageSize ": 10 ,  
" RequestId ":" DC9EB0C9 - 60AF - 4A09 - A36C - 608F701302 74 "  
}
```

10 Manage route entries

10.1 DescribeCenRegionDomainRouteEntries

Query the detailed information of CEN routes, including from which region and which network instance this route is learned.

Request parameters

| Name | Type | Required | Description |
|-------------|---------|----------|---|
| Action | String | Yes | The action to perform. Valid value: DescribeCenRegionDomainRouteEntries |
| CenId | String | Yes | The ID of the CEN instance to query. |
| CenRegionId | String | Yes | The ID of the region to query. |
| PageNumber | Integer | No | The number of pages to return. The default value is 1. |
| PageSize | Integer | No | The number of rows per page. The maximum value is 50 and the default value is 10. |

Response parameters

| Name | Type | Description |
|-----------------|---------|--|
| RequestId | String | The ID of the request. |
| TotalCount | String | The number of queried entries. |
| PageNumber | Integer | The current page number. |
| PageSize | String | The number of entries on the current page. |
| CenRouteEntries | List | The detailed information of CEN route entries. |

Table 10-1: CenRouteEntry

| Name | Type | Description |
|----------------------|--------|--|
| DestinationCidrBlock | String | The destination CIDR block of the route entry. |
| Type | String | The type of the route entry. The default value is CEN. |
| NextHopInstanceId | String | The ID of the next hop. |
| NextHopType | String | The type of the next hop, VPC or VBR. |
| NextHopRegionId | String | The ID of the region where the next hop is located. |

Examples

Request example

```
https://cbn.aliyuncs.com/?Action=DescribeCenRegionDomainRouteEntries
&CenId=cen-04sgjpvkc062ahzd26
&CenRegionId=cn-hangzhou
&CommonParameters
```

Response example

• XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DescribeCenRegionDomainRouteEntriesResponse>
  <Routes>
    <Route>
      <Source>
        <RouteType>System</RouteType>
        <RouterType>VRouter</RouterType>
        <DstCidrBlock>10.10.100.0/24</DstCidrBlock>
        <AliyunIdkp>1617256082593208</AliyunIdkp>
        <RouterId>vpc-qn1eves08n7sk62vsj3ka</RouterId>
        <RegionId>cn-hangzhou-668</RegionId>
        <NextHop></NextHop>
        <RouteTableId>vtb-qn1bindq4q7m30obbcyj0</RouteTableId>
        <PropagationScope>CEN</PropagationScope>
        <NextHopType>local</NextHopType>
      </Source>
      <RouteType>CEN</RouteType>
      <DstCidrBlock>10.10.100.0/24</DstCidrBlock>
      <NextHop></NextHop>
```

```

        < Conflicts />
      </ Route >
    </ Routes >
  < PageNumber > 1 </ PageNumber >
  < TotalCount > 1 </ TotalCount >
  < PageSize > 10 </ PageSize >
  < RequestId > C4CF2E97 - 5C04 - 4A9E - B908 - BE95FF68C7 B2 </
  RequestId >
</ DescribeCe nRegionDom ainRouteEn triesRespo nse >

```

- JSON format

```

{
  " Routes ":{
    " Route ":[
      {\
        " conflicts ":[],
        " Maid ": " maid / 24 ",
        " nexthop ":"",
        " Routetype ": " CEN ",
        " source ":{
          " aliyunIdkp ":" 1617256082 593208 ",
          " dstCidrBlo ck ":" 10 . 10 . 100 . 0 / 24 ",
          " nexthop ":"",
          " nexthopTyp e ":" local ",
          " Propagatio n scope ": " CEN ",
          " regionId ":" cn - hangzhou - 668 ",
          " routeTable Id ":" vtb - qn1bindq4q
7m30obbcyj 0 ",
          " Routetype ": " system ",
          " routerId ":" vpc - qn1eves08n 7sk62vsj3k a
",
          " routerType ":" VRouter "
        }
      ]
    },
    " PageNumber ": 1 ,
    " TotalCount ": 1 ,
    " PageSize ": 10 ,
    " RequestId ":" 187507F9 - D955 - 41A5 - 98EB - 7E4471F9D8 E7 "
  }
}

```

10.2 DescribeRouteConflict

Query the conflicted route entries in the specified VRouter or VBR.

Request parameters

| Name | Type | Required | Description |
|--------|--------|----------|--|
| Action | String | Yes | The action to perform. Valid value: DescribeRo uteConflic t |

| Name | Type | Required | Description |
|---------------------------|--------|----------|---|
| ChildInstanceRegionId | String | Yes | Specify the ID of the region where the network (VPC or VBR) is located. |
| ChildInstanceType | String | Yes | Specify the instance type. Valid value: VPC VBR. |
| ChildInstanceId | String | Yes | The instance ID of the attached network. |
| ChildInstanceRouteTableId | String | Yes | The ID of the router table. |
| DestinationCidrBlock | String | No | The destination CIDR block. |

Response parameters

| Name | Type | Description |
|----------------|---------|---|
| RequestId | String | The ID of the request. |
| TotalCount | String | The number of queried entries. |
| PageNumber | Integer | The current page number. |
| PageSize | String | The number of entries on the current page. |
| RouteConflicts | List | The detailed information of conflicted route entries. |

Table 10-2: Routeconflict

| Name | Type | Description |
|----------------------|--------|--|
| DestinationCidrBlock | String | The destination CIDR block of the route entry. |
| Regionid | String | The ID of the region. |
| InstanceId | String | The ID of the VRouter or the VBR. |
| InstanceType | String | The instance type, VPC or VBR. |

| Name | Type | Description |
|--------|--------|--|
| Status | String | <p>The status of the route entry:</p> <ul style="list-style-type: none"> · conflict : The route entry is in conflict. · overflow : The number of router entries in other network instances exceeds the limit. · prohibited : The route entry is not allowed by VBR. |

Examples

Request example

```
https://cbn.aliyuncs.com/?Action=DescribeRouteConflicts
&ChildInstanceId=vpc-wz9fldmuq4v3g8gyplqy
&ChildInstanceType=VPC
&ChildInstanceRegionId=cn-shenzhen
&ChildInstanceRouteTableId=vrt-wz93gtdvt87w7cpff071n
&CommonParameters
```

Response example

· XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DescribeRouteConflictsResponse>
  <PageNumber>1</PageNumber>
  <PageSize>10</PageSize>
  <RequestId>B6C11547-2D56-4EEC-A8D5-FDC5A53E53D0</
  RequestId>
  <RouteConflicts>
    <RouteConflict/>
  </RouteConflicts>
  <TotalCount>0</TotalCount>
</DescribeRouteConflictsResponse>
```

· JSON format

```
{
  "PageNumber": 1,
  "TotalCount": 0,
  "PageSize": 10,
  "RequestId": "B6C11547-2D56-4EEC-A8D5-FDC5A53E53D0",
  "RouteConflicts": {
    "RouteConflict": []
  }
}
```

10.3 PublishRouteEntries

Publish the route entries in the attached VPC and VBR to CEN.

Router entry list

The following table lists the route entries that can be published to CEN:

| Route entry | Network the route entry belongs to | Published to CEN by default? |
|---|------------------------------------|------------------------------|
| The route entry pointing to an ECS instance | VPC | No |
| The route entry pointing to a VPN Gateway | VPC | No |
| The route entry pointing to a HaVip | VPC | No |
| VPC system route entries | VPC | Yes |
| The route entry pointing to a local IDC | VBR | Yes |
| BGP route entries | VBR | Yes |

Request parameters

| Name | Type | Required | Description |
|-----------------------|--------|----------|--|
| Action | String | Yes | The action to perform. Valid value: PublishRouteEntries |
| CenId | String | Yes | The ID of the CEN instance where the route entry is published. |
| ChildInstanceRegionId | String | Yes | The ID of the region where the attached VBR or VPC is located. |
| ChildInstanceId | String | Yes | The ID of the attached network (VPC or VBR). |
| ChildInstanceType | String | Yes | The type of the network. Valid value: <ul style="list-style-type: none"> • VPC • VBR |

| Name | Type | Required | Description |
|---------------------------|--------|----------|---|
| ChildInstanceRouteTableId | String | Yes | The route table of the attached VBR or VPC. |
| DestinationCidrBlock | String | Yes | The destination CIDR block of the route entry to publish. |

Response parameters

| Name | Type | Description |
|-----------|--------|------------------------|
| RequestId | String | The ID of the request. |

Examples

Request example

```
https://cbn.aliyuncs.com/?Action=PublishRouteEntries
&ChildInstanceRegionId=cn-hangzhou-667
&CenId=cbn-3rh17kwhs6-208rej85
&DestinationCidrBlock=192.168.10.0/24
&ChildInstanceRouteTableId=vtb-il7qut3mjg-tlcbpk2ie3-1
&ChildInstanceId=vpc-il7krrmtp6-elewp6426kr
&ChildInstanceType=VPC
&CommonRequestParameters
```

Response example

- XML format

```
<?xml version="1.0" encoding="UTF-8"? >
<PublishRouteEntriesResponse>
  <RequestId>FBDB18D8-E91E-4978-8D6C-6E2E3EE101-330</
  RequestId>
</PublishRouteEntriesResponse>
```

- JSON format

```
{
  "RequestId": "FBDB18D8-E91E-4978-8D6C-6E2E3EE101-330"
}
```


10.4 DescribePublishedRouteEntries

Query the publish status of the route entries in the attached VPC or VBR.

Request parameters

| Name | Type | Required | Description |
|---------------------------|---------|----------|---|
| Action | String | Yes | The action to perform. Valid value: DescribePublishedRouteEntries |
| CenId | String | Yes | The ID of the CEN instance to query. |
| ChildInstanceRegionId | String | Yes | The ID of the region where the attached network (VBR or VPC) is located. |
| ChildInstanceId | String | Yes | The ID of the network (VBR or VPC). |
| ChildInstanceType | String | Yes | The attached network type: <ul style="list-style-type: none"> • VPC • VBR • CCN |
| ChildInstanceRouteTableId | String | No | The ID of the route table of the VPC or VBR. |
| DestinationCidrBlock | String | No | The destination CIDR block of the route entry to query. |
| PageNumber | Integer | No | The number of pages to return. The default value is 1. |
| PageSize | Integer | No | The number of rows per page. The maximum value is 50 and the default value is 10. |

Response parameters

| Name | Type | Description |
|-----------|--------|------------------------|
| RequestId | String | The ID of the request. |

| Name | Type | Description |
|---------------------|---------|--|
| TotalCount | String | The number of queried entries. |
| PageNumber | Integer | The current page number. |
| PageSize | String | The number of entries on the current page. |
| PublishRouteEntries | List | The detailed information of the queried route entry in the specified region. |

Table 10-3: PublishRouteEntries

| Name | Type | Description |
|---------------------------|---------|---|
| ChildInstanceRouteTableId | String | The ID of the route table. |
| DestinationCidrBlock | String | The destination CIDR block of the route entry. |
| NextHopType | String | Type of the next hop. Values: <ul style="list-style-type: none"> Instance : ECS instance (Default) HaVip : High Availability Virtual IP (HaVip) RouterInterface : Router interface |
| RouteType | String | Type of the route entry. Values: <ul style="list-style-type: none"> System : System route entry Custom : High Availability Virtual IP (HaVip) BGP : BGP route entry |
| OperationalMode | Boolean | Whether to allow the route entry to be published or removed to or from CEN: <ul style="list-style-type: none"> true : Allow the route entry to be published or removed false : Do not allow |
| NextHopId | String | The ID of the next hop. |

| Name | Type | Description |
|---------------|--------|--|
| PublishStatus | String | The publish status of the route entry in CEN: <ul style="list-style-type: none"> Published : Published NonPublished : Not published |
| Conflicts | List | A list of conflicted route entries. |

Table 10-4: RouteConflictSetType

| Name | Type | Description |
|----------------------|--------|---|
| DestinationCidrBlock | String | The destination CIDR block of the conflicted route entry. |
| RegionId | String | The ID of the region where the conflicted route entry is located. |
| InstanceId | String | The conflicted instance ID. |
| InstanceType | String | The type of the network. |
| Status | String | Reasons of exceptions: <ul style="list-style-type: none"> conflict : The route entry is conflicted with others. overflow : The number of the route entry in other network exceeds the default limit. prohibited : The route entry is not allowed in VBR. |

Example

Request example

```
https://cbn.aliyuncs.com/?Action=DescribePublishedRouteEntries
&ChildInstanceRegionId=cn-hangzhou-667
&CenId=cbn-3rh17kwhs6208rej85
&ChildInstanceId=vpc-il7krrmtp6elewp6426kr
&ChildInstanceType=VPC
&CommonRequestParameters
```

Response example

- XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DescribeRouteConflictResponse>
```

```

    < PageNumber > 1 </ PageNumber >
    < PageSize > 10 </ PageSize >
    < RequestId > B6C11547 - 2D56 - 4EEC - A8D5 - FDC5A53E53 D0 </
RequestId >
    < RouteConfl icts >
        < RouteConfl ict />
    </ RouteConfl icts >
    < TotalCount > 0 </ TotalCount >
</ DescribeRo uteConfl ictResponse >

```

- JSON format

```

{
  " TotalCount ": 2 ,
  " PublishRo uteEntries ": {
    " PublishRo uteEntries ": [
      {
        " Destinatio nCidrBlock ": " 100 . 64 . 0 . 0 / 10 ",
        " NextHopId ": "",
        " NextHopTyp e ": " service ",
        " ChildInsta nceRouteTa bleId ": " vtb - il7qut3mjpg
tlcbpk2ie3 1 ",
        " PublishSta tus ": " NonPublish ed ",
        " RouteConfl icts ": {
          " RouteConfl icts ": []
        },
        " RouteType ": " System "
      },
      {
        " Destinatio nCidrBlock ": " 192 . 168 . 10 . 0 / 24 ",
        " NextHopId ": "",
        " NextHopTyp e ": " local ",
        " ChildInsta nceRouteTa bleId ": " vtb - il7qut3mjpg
tlcbpk2ie3 1 ",
        " PublishSta tus ": " Published ",
        " RouteConfl icts ": {
          " RouteConfl icts ": []
        },
        " RouteType ": " System "
      }
    ]
  },
  " PageNumber ": 1 ,
  " RequestId ": " FF1A7B2A - 677F - 4F71 - 96EA - 6002B329F4 37
",
  " PageSize ": 10
}

```

}

10.5 WithdrawPublishedRouteEntries

Remove the route entries that have been advertised to CEN from the route table of the attached VPC or VBR.

Request parameters

| Name | Type | Required | Description |
|---------------------------|--------|----------|---|
| Action | String | Yes | The action to perform. Valid value: WithdrawPublishedRouteEntries |
| CenId | String | Yes | The ID of the CEN instance from which the route entries are removed. |
| ChildInstanceRegionId | String | Yes | The ID of the region where the attached VBR or VPC is located. |
| ChildInstanceId | String | Yes | The ID of the attached network (VPC or VBR). |
| ChildInstanceType | String | Yes | The type of the network. Valid value: <ul style="list-style-type: none"> • VPC • VBR |
| ChildInstanceRouteTableId | String | Yes | The route table of the attached VBR or VPC. |
| DestinationCidrBlock | String | Yes | The destination CIDR block of the route entry to be removed. |

Response parameters

| Name | Type | Description |
|-----------|--------|------------------------|
| RequestId | String | The ID of the request. |

Example

Request example

```
https://cnb.aliyuncs.com/?Action=WithdrawPublishedRouteEntries
```

```
& ChildInstanceRegionId = cn - hangzhou - 667
& CenId = cbn - 3rh17kwhs6 208rej85
& DestinationCidrBlock = 192 . 168 . 10 . 0 / 24
& ChildInstanceRouteTableId = vtb - il7qut3mjg tlcblk2ie3 1
& ChildInstanceId = vpc - il7krrmtp6 elewp6426k r
& ChildInstanceType = VPC
& CommonRequestParameters
```

Response example

- XML format

```
<? xml version = " 1 . 0 " encoding = " UTF - 8 " ? >
< PublishRouteEntriesResponse >
  < RequestId > FBDB18D8 - E91E - 4978 - 8D6C - 6E2E3EE101 330 </
  RequestId >
</ PublishRouteEntriesResponse >
```

- JSON format

```
{
  " RequestId ": " FBDB18D8 - E91E - 4978 - 8D6C - 6E2E3EE101 33
}
```

11 Health checks

11.1 EnableCenVbrHealthCheck

Enable the health check of VBR to timely detect faulty physical connections.

Request parameters

| Name | Type | Require | Description |
|---------------------|--------|---------|--|
| Action | String | Yes | The action to perform. Valid value: EnableCenVbrHealthCheck |
| CenId | String | Yes | The ID of the CEN instance. |
| VbrInstanceRegionId | String | Yes | The region of the VBR. You can obtain the region ID by calling the DescribeRegions API. |
| VbrInstanceId | String | Yes | The ID of the VBR. |
| HealthCheckSourceIp | String | Yes | The source IP address of the health check. |
| HealthCheckTargetIp | String | Yes | The destination IP address of the health check. |
| VbrInstanceOwnerId | Long | No | The UID of the VBR. |

Response parameters

| Name | Type | Description |
|-----------|--------|------------------------|
| RequestId | String | The ID of the request. |

Examples

Request example

```
https://cn.aliyuncs.com/?Action=EnableCenVbrHealthCheck
&CenId=cen-kojok19x3j0q6kx5qf
&VbrInstanceRegionId=cn-shenzhen
```

```
& VbrInstanc eId = vbr - wz95o9aylj 181n5mzk8z a
& HealthChec kSourceIp = 192 . 168 . 1 . 2
& HealthChec kTargetIp = 10 . 0 . 0 . 2
& CommonPara meters
```

Return example

- XML format

```
<? xml version =" 1 . 0 " encoding =" UTF - 8 "? >
< EnableCenV brHealthCh eckRespons e >
  < RequestId > A278B8A6 - A5B8 - 4FDE - 9F70 - 95F0F6A1D6 8A </
  RequestId >
  < CenId > Cen - atlpf6evc5 kqchpma5 </ CenId >
  < VbrId > vbr - il7ldy0ux6 rb15lc2snr w </ VbrId >
  < RegionId > cn - hangzhou </ RegionId >
  < SourceIp > 10 . 10 . 10 . 10 </ SourceIp >
  < TargetIp > 10 . 10 . 10 . 11 </ TargetIp >
  < PacketNum > 3 </ PacketNum >
  < Status > Enable </ Status >
</ EnableCenV brHealthCh eckRespons e >
```

- JSON format

```
" RequestId ": " A278B8A6 - A5B8 - 4FDE - 9F70 - 95F0F6A1D6 8A ",
" CenId ": " Cen - atlpf6evc5 kqchpma5 ",
" VbrId ": " vbr - il7ldy0ux6 rb15lc2snr w ",
" RegionId ": " cn - hangzhou ",
" SourceIp ": " 10 . 10 . 10 . 10 ",
" TargetIp ": " 10 . 10 . 10 . 11 ",
" PacketNum ": " 3 ",
" Status ": " Enable "
```

11.2 DescribeCenVbrHealthCheck

Queries the health check status of the physical connections in a specified region.

Debug

[Use OpenAPI Explorer to perform debug operations and generate SDK code examples.](#)

Request parameters

| Parameter | Type | Required ? | Example value | Description |
|-------------------------|--------|---------------|---------------|---|
| VbrInstanc eRegionId | String | Yes | cn-hangzhou | The ID of the region to which the VBR belongs. To query the region ID, call DescribeRegions . |

| Parameter | Type | Required ? | Example value | Description |
|--------------------|---------|------------|---------------------------|--|
| Action | String | No | DescribeCenVbrHealthCheck | Optional. The name of this action. Value: DescribeCenVbrHealthCheckRequest |
| CenId | String | No | cen-kojok19x3j0q**** | Optional. The ID of the CEN instance. |
| PageNumber | Integer | No | 2 | Optional. The page number. Default value: 1 |
| PageSize | Integer | No | 2 | Optional. The number of entries per page in the case of a paged query result. Maximum value: 50. Default value: 10 |
| VbrInstanceId | String | No | vbr-wz95o9aylj181**** | Optional. The ID of the VBR. |
| VbrInstanceOwnerId | Long | No | 123465253556777 | Optional. The ID of the account to which the VBR belongs. |

Response parameters

| Parameter | Type | Example value | Description |
|-----------------|---------|--------------------------------------|--------------------------------------|
| PageNumber | Integer | 2 | The current page number. |
| PageSize | Integer | 2 | The number of entries per page. |
| RequestId | String | A278B8A6-A5B8-4FDE-9F70-95F0F6A1D68A | The ID of the request. |
| TotalCount | Integer | 2 | The total number of queried entries. |
| VbrHealthChecks | | | The details of VBR health checks. |

| Parameter | Type | Example value | Description |
|---------------------|--------|-------------------------|---|
| CenId | String | cen-kojok19x3j0q6**** | The ID of the CEN instance. |
| Delay | Long | 12 | The delay. |
| HealthCheckSourceIp | String | 192.168.1.xx | The source IP address of the health check. |
| HealthCheckTargetIp | String | 192.168.1.xx | The destination IP address of the health check. |
| LinkStatus | String | Active | The health status of the physical connection. |
| PacketLoss | Long | 5 | The packet loss rate. |
| VbrInstanceId | String | vbr-il7ldy0ux6rb15l**** | The ID of the VBR. |

Examples

Request example

```
http ( s )://[ Endpoint ]/? Action = DescribeCenVbrHealthCheck
& VbrInstanceId = cn - hangzhou
&< CommonParameters >
```

Response examples

XML format

```
< DescribeCenVbrHealthCheckResponse >
  < HealthChecks >
    < HealthCheck >
      < CenId > Cen - atlpf6evc5_kqch ****</ CenId >
      < VbrInstanceId > vbr - il7ldy0ux6_rb15lc2s
****</ VbrInstanceId >
      < HealthCheckSourceIp > 10 . 10 . 10 . xx </
HealthCheckSourceIp >
      < HealthCheckTargetIp > 10 . 10 . 10 . xx </
HealthCheckTargetIp >
      < Delay > 3ms </ Delay >
      < Packetloss > 5 %</ Packetloss >
    </ HealthCheck >
  </ HealthChecks >
  < PageNumber > 1 </ PageNumber >
  < TotalCount > 1 </ TotalCount >
  < PageSize > 10 </ PageSize >
```

```
< RequestId > A278B8A6 - A5B8 - 4FDE - 9F70 - 95F0F6A1D6 8A </
  RequestId >
</ DescribeCe nVbrHealth CheckResponse >
```

JSON format

```
{
  " DescribeCe nVbrHealth CheckResponse ":{
    " PageNumber ":" 1 ",
    " TotalCount ":" 1 ",
    " PageSize ":" 10 ",
    " RequestId ":" A278B8A6 - A5B8 - 4FDE - 9F70 - 95F0F6A1D6 8A ",
    " HealthChecks ":{
      " HealthCheck ":{
        " Delay ":" 3ms ",
        " VbrInstanceID ":" vbr - il7ldy0ux6 rb15lc2s ****",
        " Packetloss ":" 5 %",
        " CenId ":" Cen - atlpf6evc5 kqch ****",
        " HealthCheckSourceIp ":" 10 . 10 . 10 . xx ",
        " HealthCheckTargetIp ":" 10 . 10 . 10 . xx "
      }
    }
  }
}
```

Errors

For a list of error codes, visit the [API Error Center](#).

11.3 DisableCenVbrHealthCheck

Disable the health check of a VBR.

Request Parameters

| Name | Type | Require | Description |
|-------------------------|--------|---------|--|
| Action | String | Yes | The action to perform. Valid value: DisableCen VbrHealthC heck |
| CenId | String | Yes | The ID of the CEN instance. |
| VbrInstanc eRegionId | String | Yes | The region of the VBR. You can obtain the region ID by calling the DescribeRegions API. |
| VbrInstanc eId | String | Yes | The ID of the VBR. |
| VbrInstanc eOwnerId | Long | No | The UID of the VBR. |

Return Parameters

| Name | Type | Description |
|-----------|--------|------------------------|
| RequestId | String | The ID of the request. |

Examples**Request example**

```
https://cn-northern-1.aliyuncs.com/?Action=DisableCenVbrHealthCheck
&CenId=cen-kojok19x3j0q6kx5qf
&VbrInstanceId=cn-shenzhen
&VbrInstanceId=vbr-wz95o9aylj181n5mzk8za
&CommonParameters
```

Return example

• XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DisableCenVbrHealthCheckResponse>
  <RequestId>A278B8A6-A5B8-4FDE-9F70-95F0F6A1D68A</RequestId>
</DisableCenVbrHealthCheckResponse>
```

• JSON format

```
"RequestId": "A278B8A6-A5B8-4FDE-9F70-95F0F6A1D68A"
```

12 Flow logs

12.1 CreateFlowlog

Creates a flow log.

Debug

[Use OpenAPI Explorer to perform debug operations and generate SDK code examples.](#)

Request parameters

| Parameter | Type | Required? | Example value | Description |
|--------------|--------|-----------|------------------------|---|
| CenId | String | Yes | cen-7qthudw0ll6jmc**** | The ID of the CEN instance. |
| LogStoreName | String | Yes | FlowLogStore | The LogStore that stores the captured traffic information. |
| ProjectName | String | Yes | FlowLogProject | The Project that stores the captured traffic information. |
| RegionId | String | Yes | cn-hangzhou | The region ID of the flow log. To query the region ID, call DescribeRegions . |
| Action | String | No | CreateFlowlog | Optional. The name of this action. Value: CreateFlowLog |
| Description | String | No | This is my Flowlog. | Optional. The description of the flow log. The description must be 2 to 256 characters in length. It must start with a letter or a Chinese character, and cannot start with <code>http://</code> or <code>https://</code> . |

| Parameter | Type | Required? | Example value | Description |
|-------------|--------|-----------|---------------|---|
| FlowLogName | String | No | myFlowlog | Optional. The name of the flow log. The name must be 2 to 128 characters in length and can contain letters, numbers, periods (.), underscores (_), and hyphens (-). The name must start with a letter or a Chinese character. It cannot start with http:// or https://. |

Response parameters

| Parameter | Type | Example value | Description |
|-----------|--------|--------------------------------------|-------------------------|
| FlowLogId | String | flowlog-m5evbtbpt**** | The ID of the flow log. |
| RequestId | String | 54B48E3D-DF70-471B-AA93-08E683A1B457 | The ID of the request. |

Examples

Request example

```

http ( s )://[ Endpoint ]/? Action = CreateFlow_log
& CenId = cen - 7qthudw0ll 6jmc ****
& LogStoreName = FlowLogStore
& ProjectName = FlowLogProject
& RegionId = cn - hangzhou
&< CommonParameters >
    
```

Response examples

XML format

```

< CreateFlow_logResponse >
  < RequestId > 54B48E3D - DF70 - 471B - AA93 - 08E683A1B4 57 </
  RequestId >
  < FlowLogId > flowlog - m5evbtbptx ffgs ****</ FlowLogId >
    
```

```
</ CreateFlow logResponse >
```

JSON format

```
{
  "RequestId ":" 54B48E3D - DF70 - 471B - AA93 - 08E683A1B4 57 ",
  "FlowLogId ":" flowlog - m5evbtbpt ****"
}
```

Errors

For a list of error codes, visit the [API Error Center](#).

12.2 ModifyFlowLogAttribute

Modifies the name and description of a flow log.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

| Parameter | Type | Required? | Example value | Description |
|-----------|--------|-----------|------------------------|---|
| CenId | String | Yes | cen-7qthudw0ll6jmc**** | The ID of the CEN instance. |
| FlowLogId | String | Yes | flowlog-m5evbtbpt**** | The ID of the flow log. |
| RegionId | String | Yes | cn-hangzhou | The region ID of the flow log. To query the region ID, call DescribeRegions . |
| Action | String | No | ModifyFlowLogAttribute | Optional. The name of this action. Value: ModifyFlowLogAttribute |

| Parameter | Type | Required ? | Example value | Description |
|-------------|--------|------------|---------------------|--|
| Description | String | No | This is my Flowlog. | Optional. The description of the flow log. The description must be 2 to 256 characters in length. It must start with a letter or a Chinese character, and cannot start with <code>http ://</code> or <code>https ://</code> . |
| FlowLogName | String | No | myFlowlog | Optional. The name of the flow log. The name must be 2 to 128 characters in length and can contain letters, numbers, periods (.), underscores (_), and hyphens (-). The name must start with a letter or a Chinese character. It cannot start with <code>http ://</code> or <code>https ://</code> . |

Response parameters

| Parameter | Type | Example value | Description |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | F7DDDC17-FA06-4AC2-8F35-59D2470FCFC1 | The ID of the request. |

Examples

Request example

```

http ( s )://[ Endpoint ]/? Action = ModifyFlow LogAttribute
& CenId = cen - 7qthudw0ll 6jmc ****
& FlowLogId = flowlog - m5evbtbpt ****
& RegionId = cn - hangzhou
&< CommonParameters >
    
```

Response examples

XML format

```
< ModifyFlow LogAttribu teResponse >
  < RequestId > F7DDDC17 - FA06 - 4AC2 - 8F35 - 59D2470FCF C1 </
  RequestId >
</ ModifyFlow LogAttribu teResponse >
```

JSON format

```
{
  " RequestId ":" F7DDDC17 - FA06 - 4AC2 - 8F35 - 59D2470FCF C1 "
```

Errors

For a list of error codes, visit the [API Error Center](#).

12.3 DescribeFlowlogs

Queries one or more flow logs.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

| Parameter | Type | Required? | Example value | Description |
|-------------|--------|-----------|------------------------|---|
| Action | String | No | DescribeFlowlogs | Optional. The name of this action. Value: DescribeFlowlogs |
| CenId | String | No | cen-7qthudw0ll6jmc**** | Optional. The ID of the CEN instance. |
| Description | String | No | This is my Flowlog. | Optional. The description of the flow log. The description must be 2 to 256 characters in length. It must start with a letter or a Chinese character, and cannot start with <code>http://</code> or <code>https://</code> . |

| Parameter | Type | Required ? | Example value | Description |
|-------------|---------|---------------|-----------------------|---|
| FlowLogId | String | No | flowlog-m5evbtbpt**** | Optional. The ID of the flow log. |
| FlowLogName | String | No | myFlowlog | Optional. The name of the flow log. |
| PageNumber | Integer | No | 1 | Optional. The current page number. |
| PageSize | Integer | No | 10 | Optional. The number of entries per page. |
| RegionId | String | No | cn-hangzhou | Optional. The region ID of the flow log. To query the region ID, call DescribeRegions . |

Response parameters

| Parameter | Type | Example value | Description |
|--------------|--------|------------------------|--|
| FlowLogs | | | The details of the flow log. |
| CenId | String | cen-7qthudw0ll6jmc**** | The ID of the CEN instance. |
| CreationTime | String | 2018-07-24T13:00:52Z | The time when the flow log is created. |
| Description | String | abc | The description of the flow log. |
| FlowLogId | String | flowlog-m5evbtbpt**** | The ID of the flow log. |
| FlowLogName | String | myFlowlog | The name of the flow log. |
| LogStoreName | String | FlowLogStore | The LogStore that stores the captured traffic information. |

| Parameter | Type | Example value | Description |
|-------------|--------|--------------------------------------|---|
| ProjectName | String | FlowLogProject | The Project that stores the captured traffic information. |
| PageNumber | String | 1 | The current page number. |
| PageSize | String | 10 | The number of entries per page. |
| RequestId | String | F7DDDC17-FA06-4AC2-8F35-59D2470FCFC1 | The ID of the request. |
| TotalCount | String | 3 | The total number of queried flow logs. |

Examples

Request example

```
http ( s )://[ Endpoint ]/? Action = DescribeFl owlogs
&< CommonPara meters >
```

Response examples

XML format

```
< DescribeFl owlogsResp onse >
  < RequestId > 04F0F334 - 1335 - 436C - A1D7 - 6C044FExxx xx </
  RequestId >
</ DescribeFl owlogsResp onse >
```

JSON format

```
{
  " RequestId ":" 04F0F334 - 1335 - 436C - A1D7 - 6C044FExxx xx "
}
```

Errors

For a list of error codes, visit the [API Error Center](#).

12.4 ActiveFlowLog

Starts a flow log. After a flow log is started, the traffic information of the specified cloud resource starts to be collected.

Debug

[Use OpenAPI Explorer to perform debug operations and generate SDK code examples.](#)

Request parameters

| Parameter | Type | Required? | Example value | Description |
|-----------|--------|-----------|------------------------|---|
| CenId | String | Yes | cen-7qthudw0ll6jmc**** | The ID of the CEN instance. |
| FlowLogId | String | Yes | flowlog-m5evbtbpt**** | The ID of the flow log. |
| RegionId | String | Yes | cn-hangzhou | The region ID of the flow log. To query the region ID, call DescribeRegions . |
| Action | String | No | ActiveFlowLog | Optional. The name of this action. Value: ActiveFlowLog |

Response parameters

| Parameter | Type | Example value | Description |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | F7DDDC17-FA06-4AC2-8F35-59D2470FCFC1 | The ID of the request. |

Examples

Request example

```
http ( s ) : // [ Endpoint ] / ? Action = ActiveFlow Log
& CenId = cen - 7qthudw0ll 6jmc ****
& FlowLogId = flowlog - m5evbtbpt ****
& RegionId = cn - hangzhou
&< CommonPara meters >
```

Response examples

XML format

```
< ActiveFlow LogResponse >
  < RequestId > F7DDDC17 - FA06 - 4AC2 - 8F35 - 59D2470FCF C1 </
  RequestId >
</ ActiveFlow LogResponse >
```

JSON format

```
{
  " RequestId ":" F7DDDC17 - FA06 - 4AC2 - 8F35 - 59D2470FCF C1 "
}
```

Errors

For a list of error codes, visit the [API Error Center](#).

12.5 DeactiveFlowLog

Stops a flow log. After a flow log is stopped, the traffic information of the specified cloud resource is no longer collected.

Debug

[Use OpenAPI Explorer to perform debug operations and generate SDK code examples.](#)

Request parameters

| Parameter | Type | Required? | Example value | Description |
|-----------|--------|-----------|------------------------|---|
| CenId | String | Yes | cen-7qthudw0ll6jmc**** | The ID of the CEN instance. |
| FlowLogId | String | Yes | flowlog-m5evbtbpt**** | The ID of the flow log. |
| RegionId | String | Yes | cn-hangzhou | The region ID of the flow log. To query the region ID, call DescribeRegions . |
| Action | String | No | DeactiveFlowLog | Optional. The name of this action. Value: DeactiveFlowLog |

Response parameters

| Parameter | Type | Example value | Description |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | F7DDDC17-FA06-4AC2-8F35-59D2470FCFC1 | The ID of the request. |

Examples

Request example

```
http ( s )://[ Endpoint ]/? Action = DeactiveFl owLog
& CenId = cen - 7qthudw0ll 6jmc ****
& FlowLogId = flowlog - m5evbtbpt ****
& RegionId = cn - hangzhou
&< CommonPara meters >
```

Response examples

XML format

```
< DeactiveFl owLogRespo nse >
  < RequestId > F7DDDC17 - FA06 - 4AC2 - 8F35 - 59D2470FCF C1 </
  RequestId >
</ DeactiveFl owLogRespo nse >
```

JSON format

```
{
  " RequestId ":" F7DDDC17 - FA06 - 4AC2 - 8F35 - 59D2470FCF C1 "
}
```

Errors

For a list of error codes, visit the [API Error Center](#).

12.6 DeleteFlowlog

Deletes a flow log.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

| Parameter | Type | Required ? | Example value | Description |
|-----------|--------|---------------|------------------------|--|
| CenId | String | Yes | cen-7qthudw0ll6jmc**** | The ID of the CEN instance. |
| FlowLogId | String | Yes | flowlog-m5evbtbpt**** | The ID of the flow log. |
| RegionId | String | Yes | cn-hangzhou | The region ID of the flow log. To query the region ID, call DescribeRegions . |
| Action | String | No | DeleteFlowlog | Optional. The name of this action. Value: DeleteFlowlog |

Response parameters

| Parameter | Type | Example value | Description |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | F7DDDC17-FA06-4AC2-8F35-59D2470FCFC1 | The ID of the request. |

Examples

Request example

```
http ( s )://[ Endpoint ]/? Action = DeleteFlow log
& CenId = cen - 7qthudw0ll 6jmc ****
& FlowLogId = flowlog - m5evbtbpt ****
& RegionId = cn - hangzhou
&< CommonPara meters >
```

Response examples

XML format

```
< DeleteFlow LogResponse >
  < RequestId > F7DDDC17 - FA06 - 4AC2 - 8F35 - 59D2470FCF C1
</ RequestId >
```

```
</ DeleteFlow LogResponse >
```

JSON format

```
{  
  "RequestId ":" F7DDDC17 - FA06 - 4AC2 - 8F35 - 59D2470FCF C1 "  
}
```

Errors

For a list of error codes, visit the [API Error Center](#).

13 Routing policies

13.1 CreateCenRouteMap

Creates a routing policy.


Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

| Parameter | Type | Required? | Example value | Description |
|-------------|--------|-----------|------------------------|--|
| CenId | String | Yes | cen-7qthudw0ll6jmc**** | The ID of the CEN instance for which you want to create a routing policy. |
| CenRegionId | String | Yes | cn-hangzhou | The region of the CEN instance. To query the region ID, call DescribeRegions . |


| Parameter | Type | Required? | Example value | Description |
|--------------|---------|-----------|---------------|--|
| MapResult | String | Yes | Permit | <p>The result action of the routing policy. Valid values:</p> <ul style="list-style-type: none"> · Permit: If a route matches all the matching conditions on the node, corresponding executions are performed and the route is allowed. If a route fails to match any matching condition on the node, the next node is checked to see if the route matches the conditions in this next node. · Deny: If a route matches all the matching conditions on the node, the route is rejected and the matching process ends immediately. If a route fails to match any matching condition on the node, the next node is checked to see if the route matches the conditions in this next node. |
| NextPriority | Integer | Yes | 20 | <p>The priority of the next associated node. Value range: 1 to 100</p> |


| Parameter | Type | Required ? | Example value | Description |
|--------------------|---------|------------|-------------------|--|
| Priority | Integer | Yes | 3 | <p>The priority of the routing policy node. Value range: 1 to 100. A smaller number represents a higher priority.</p> <div style="background-color: #f0f0f0; padding: 5px;">  Note: Priorities of nodes in the same region and the same direction must be unique. When a route is processed, the node with the smallest number is checked for matching first. Therefore, we recommend that you specify an appropriate priority for each node. </div> |
| TransmitDirection | String | Yes | RegionIn | <p>The direction of the routing policy. Valid values:</p> <ul style="list-style-type: none"> · RegionIn: Inbound routing to the CEN node · RegionOut: Outbound routing from the CEN node |
| Action | String | No | CreateCenRouteMap | <p>Optional. The name of this action. Value: CreateCenRouteMap</p> |
| AsPathMatchingMode | String | No | Include | <p>Optional. The as-path matching mode as a matching condition</p> <p>. Valid values:</p> <ul style="list-style-type: none"> · Include: Indicates fuzzy matching. · Complete: Indicates exact matching. |

| Parameter | Type | Required ? | Example value | Description |
|-------------------------------|------------|------------|---------------|---|
| CidrMatchMode | String | No | Include | Optional. The prefix matching mode as a matching condition. Valid values: <ul style="list-style-type: none"> · Include: Indicates fuzzy matching. · Complete: Indicates exact matching. |
| CommunityMatchMode | String | No | Include | Optional. The community attribute matching mode as a matching condition. Valid values: <ul style="list-style-type: none"> · Include: Indicates fuzzy matching. · Complete: Indicates exact matching. |
| CommunityOperateMode | String | No | Additive | Optional. The operation on the community attribute as an execution. Valid values: <ul style="list-style-type: none"> · Additive: Set a value for the community attribute. · Replace: Modify the value of the community attribute. |
| Description | String | No | abc | The description of the node. |
| DestinationChildInstanceTypes | RepeatList | No | VPC,VBR | Optional. The destination instance type as a matching condition. Valid values: VPC VBR CCN. Separate multiple instance types by using commas (,). |

| Parameter | Type | Required ? | Example value | Description |
|------------------------------------|------------|------------|------------------------|--|
| DestinationCidrBlocks . N | RepeatList | No | 1.1.1.0/10, 2.0.0.0/16 | Optional. The prefix list as a matching condition. Use the CIDR notation. Separate multiple CIDR blocks by using commas (.). Up to 32 CIDR blocks can be entered. |
| DestinationInstanceIds . N | RepeatList | No | vpc-a, vpc-b, vbr-a | Optional. The list of target instance IDs as a matching condition. Separate multiple instance IDs by using commas (.). Up to 32 instance IDs can be entered. |
| DestinationInstanceIdsReverseMatch | Boolean | No | false | Optional. The matching method of the DestinationInstanceIds matching condition. Valid values: <ul style="list-style-type: none"> · false (default): If the destination instance ID of a route is included in DestinationInstanceIds , the route does not match the node. · true: If the destination instance ID of a route is not included in DestinationInstanceIds , the route matches the node. |

| Parameter | Type | Required ? | Example value | Description |
|------------------------------|------------|------------|---------------|---|
| DestinationRouteTableIds . N | RepeatList | No | vtb-a, vtb-b | Optional. The list of target route table IDs as a matching condition. Separate multiple route table IDs by using commas (.). Up to 32 route table IDs can be entered. |
| MatchAsns . N | RepeatList | No | 65501 | Optional. The list of as-path as a matching condition. Only AS SEQUENCE is supported. AS SET, AS CONFED SEQUENCE, and AS CONFED SET are not supported. That is , only the list of AS numbers is supported. Sets and sub-lists are not supported. |

| Parameter | Type | Required ? | Example value | Description |
|-----------------------|------------|------------|-----------------------|--|
| MatchCommunitySet . N | RepeatList | No | 65501:1,65001:2,60011 | <p>Optional. The communities of a matched route. It is a matching condition. The format of each community is nn: nn. Value range of nn: 1 to 65535. Separate multiple communities by using commas (,). Up to 32 communities can be entered. Communities must comply with RFC 1997. Large communities (RFC 8092) are not supported.</p> <div style="background-color: #f0f0f0; padding: 5px; border: 1px solid #ccc;">  Note: Community configuration errors may cause a problem that the route cannot be published to the on-premises data center. </div> |

| Parameter | Type | Required ? | Example value | Description |
|----------------------------|------------|------------|---------------------------|--|
| OperateCommunitySet . N | RepeatList | No | 65501:1,65001: 2,60011 | <p>Optional. The communities on which you perform operations. It is an execute statement. The format of each community is nn: nn. Value range of nn: 1 to 65535. Separate multiple communities by using commas (,). Up to 32 communities can be entered. Communities must comply with RFC 1997. Large communities (RFC 8092) are not supported.</p> <div style="border: 1px solid gray; background-color: #f0f0f0; padding: 5px; margin-top: 10px;">  Note: Community configuration errors may cause a problem that the route cannot be published to the on-premises data center. </div> |
| Preference | Integer | No | 22 | <p>Optional. The priority of a matched route to be modified. Value range: 1 to 100. Default value: 50. A smaller number indicates a higher priority.</p> <p>Routing priorities: the length of BGP as_path (a shorter as_path represents a higher priority) > routes in the local region > routes learnt from other regions > routes modified through routemap</p> |

| Parameter | Type | Required ? | Example value | Description |
|------------------------------|------------|------------|---------------------|---|
| RouteTypes . N | RepeatList | No | System, Custom, BGP | <p>Optional. The route type as a matching condition. Valid values:</p> <ul style="list-style-type: none"> • System: Indicates system routes. • Custom: Indicates user routes. • BGP: Indicates BGP routes. <p>Multiple types can be entered . Separate multiple types by using commas (,).</p> |
| SourceChildInstanceTypes . N | RepeatList | No | VPC, VBR, CCN | <p>Optional. The source instance type as a matching condition. Valid values: VPC VBR CCN . Separate multiple instance types by using commas (,).</p> |
| SourceInstanceIds . N | RepeatList | No | vpc-a, vpc-b, vbr-a | <p>Optional. The source instance ID as a matching condition. Separate multiple instance IDs by using commas (,). Up to 32 instance IDs can be entered.</p> |

| Parameter | Type | Required ? | Example value | Description |
|-------------------------------|------------|------------|-------------------------|---|
| SourceInstanceIdsReverseMatch | Boolean | No | false | Optional. The matching method of the SourceInstanceIds matching condition. Valid values: <ul style="list-style-type: none"> · false (default): If the source instance ID contained in a route is included in SourceInstanceIds, the route does not match the node. · true: If the source instance ID contained in a route is not included in SourceInstanceIds, the route matches the node. |
| SourceRegionIds . N | RepeatList | No | cn-beijing, cn-hangzhou | Optional. The region ID as a matching condition. Separate multiple region IDs by using commas (.). Up to 32 region IDs can be entered. |
| SourceRouteTableIds . N | RepeatList | No | vtb-a, vtb-b | Optional. The source route table ID as a matching condition. Separate multiple route table IDs by using commas (.). Up to 32 route table IDs can be entered. |

Response parameters

| Parameter | Type | Example value | Description |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | 54B48E3D-DF70-471B-AA93-08E683A1B457 | The ID of the request. |

| Parameter | Type | Example value | Description |
|------------|--------|----------------------------|-------------------------------|
| RouteMapId | String | cenrmap-w4yf7toozfol3q**** | The ID of the routing policy. |

Examples

Request example

```
http ( s )://[ Endpoint ]/? Action = CreateCenR outeMap
& CenId = cen - 7qthudw0ll 6jmc ****
& CenRegionI d = cn - hangzhou
& MapResult = Permit
& NextPiori ty = 20
& Priority = 3
& TransmitDi rection = RegionIn
&< CommonPara meters >
```

Response examples

XML format

```
< CreateCenR outeMapRes ponse >
  < RequestId > 62172DD5 - 6BAC - 45DF - 8D44 - 6DFG456BAC </
  RequestId >
  < RouteMapId > rmap - df12d22sd2 3 ****</ RouteMapId >
</ CreateCenR outeMapRes ponse >
```

JSON format

```
{
  " RouteMapId ":" cenrmap - w4yf7toozf ol3q ****",
  " RequestId ":" 62172DD5 - 6BAC - 45DF - 8D44 - 56SDF467BA C "
}
```

Errors

For a list of error codes, visit the [API Error Center](#).

13.2 DescribeCenRouteMaps

Queries routing policies.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

| Parameter | Type | Required? | Example value | Description |
|-------------------|---------|-----------|-------------------------|---|
| CenId | String | Yes | cen-7qthudw0ll6jmc**** | The ID of the CEN instance. |
| Action | String | No | DescribeCenRouteMaps | Optional. The name of this action. Value: DescribeCenRouteMaps |
| CenRegionId | String | No | cn-beijing | Optional. The region of the CEN instance. To query the region ID, call DescribeRegions . |
| PageNumber | Integer | No | 1 | Optional. The page number of the routing policy list. Default value: 1 |
| PageSize | Integer | No | 10 | Optional. The number of rows per page for a paged query. Maximum value: 50. Default value: 10. |
| RouteMapId | String | No | cenrmap-abcdedfghij**** | Optional. The ID of the routing policy. |
| TransmitDirection | String | No | RegionIn | Optional. The direction of the routing policy. Valid values: <ul style="list-style-type: none"> • RegionIn: inbound routing to the CEN node • RegionOut: outbound routing from the CEN node |

Response parameters

| Parameter | Type | Example value | Description |
|--------------------|---------|-------------------------------------|--|
| PageNumber | Integer | 1 | The current page number. |
| PageSize | Integer | 10 | The number of entries per page. |
| RequestId | String | 54B48E3D-DF70-471B-AA93-08E683A1B45 | The ID of the request. |
| RouteMaps | | | The routing policy details. |
| AsPathMatchMode | String | Include | The as-path matching mode as a matching condition. Valid values: <ul style="list-style-type: none"> • Include: Indicates fuzzy matching. • Complete: Indicates exact matching. |
| CenId | String | cen-7qthudw0ll6jmc**** | The ID of the CEN instance. |
| CenRegionId | String | cn-hangzhou | The region of the CEN instance. |
| CidrMatchMode | String | Include | The prefix matching mode as a matching condition. Valid values: <ul style="list-style-type: none"> • Include: Indicates fuzzy matching. • Complete: Indicates exact matching. |
| CommunityMatchMode | String | Include | The community attribute matching mode as a matching condition. Valid values: <ul style="list-style-type: none"> • Include: Indicates fuzzy matching. • Complete: Indicates exact matching. |

| Parameter | Type | Example value | Description |
|------------------------------------|---------|------------------------|--|
| CommunityOperateMode | String | Additive | The operation on the community attribute as an execution. Valid values: <ul style="list-style-type: none"> · Additive: Set a value for the community attribute. · Replace: Modify the value of the community attribute. |
| Description | String | abc | The description of the routing policy. |
| DestinationChildInstanceTypes | | VPC,VBR | The destination instance type as a matching condition. Valid values: VPC VBR CCN |
| DestinationCidrBlocks | | 1.1.1.0/10, 2.0.0.0/16 | The prefix list as a matching condition. |
| DestinationInstanceIds | | vpc-a, vpc-b, vbr-a | The list of target instance IDs as a matching condition. |
| DestinationInstanceIdsReverseMatch | Boolean | false | The matching method of the DestinationInstanceIds matching condition. Valid values: <ul style="list-style-type: none"> · false (default): If the destination instance ID of a route is included in DestinationInstanceIds, the route does not match the node. · true: If the destination instance ID of a route is not included in DestinationInstanceIds, the route matches the node. |
| DestinationRouteTableIds | | vtb-a, vtb-b | The list of target route table IDs as a matching condition. |

| Parameter | Type | Example value | Description |
|---------------------|---------|-----------------------|--|
| MapResult | String | Permit | <p>The result action of the routing policy. Valid values:</p> <ul style="list-style-type: none"> · Permit: If a route matches all the matching conditions on the node, corresponding executions are performed and the route is allowed. If a route fails to match any matching condition on the node, the next node is checked to see if the route matches the conditions in this next node. · Deny: If a route matches all the matching conditions on the node, the route is rejected and the matching process ends immediately. If a route fails to match any matching condition on the node, the next node is checked to see if the route matches the conditions in this next node. |
| MatchAsns | | 65501 | The as-path list as a matching condition. |
| MatchCommunitySet | | 65501:1,65001:2,60011 | The communities of a matched route. This parameter is a matching condition. |
| NextPriority | Integer | 33 | The priority of the next associated routing policy node. Value range: 1 to 100 |
| OperateCommunitySet | | 65501:1,65001:2,60011 | The communities on which you perform operations. This parameter is an execute statement. |

| Parameter | Type | Example value | Description |
|-------------------------------|---------|-----------------------------|---|
| Preference | Integer | 20 | The priority of a matched route to be modified. This parameter is an execute statement. |
| Priority | Integer | 22 | The priority of the routing policy node. Value range: 1 to 100 |
| RouteMapId | String | cenrmap- abcdedfghij**** | The ID of the routing policy. |
| RouteTypes | | System,Custom, BGP | The route type as a matching condition. Valid values: <ul style="list-style-type: none"> • System: Indicates system routes. • Custom: Indicates user routes. • BGP: Indicates BGP routes. |
| SourceChildInstanceTypes | | VPC,VBR,CCN | The source instance type as a matching condition. Valid values: VPC VBR CCN |
| SourceInstanceIds | | vpc-a, vpc-b, vbr-a | The source instance ID as a matching condition. |
| SourceInstanceIdsReverseMatch | Boolean | false | The matching method of the SourceInstanceIds matching condition. Valid values: <ul style="list-style-type: none"> • false (default): If the source instance ID contained in a route is included in <code>SourceInstanceIds</code>, the route does not match the node. • true: If the source instance ID contained in a route is not included in <code>SourceInstanceIds</code>, the route matches the node. |

| Parameter | Type | Example value | Description |
|---------------------|--------|-------------------------|--|
| SourceRegionIds | | cn-beijing, cn-hangzhou | The resource region ID as a matching condition. |
| SourceRouteTableIds | | vtb-a, vtb-b | The source route table ID as a matching condition. |
| TransmitDirection | String | RegionIn | The direction of the routing policy. Valid values: <ul style="list-style-type: none"> RegionIn: inbound routing to the CEN node RegionOut: outbound routing from the CEN node |

Examples

Request example

```
http ( s )://[ Endpoint ]/? Action = DescribeCenRouteMaps
& CenId = cen - 7qthudw0ll 6jmc ****
&< CommonParameters >
```

Response examples

XML format

```
< DescribeCenRouteMaps Response >
  < RouteMaps >
    < RouteMap >
      < Status > Active </ Status >
      < CenRegionId > cn - beijing </ CenRegionId >
      < RouteMapId > cenmap - jumdfzmj5s ggg1 ****</ RouteMapId >
      < MapResult > Permit </ MapResult >
      < TransmitDirection > RegionIn </ TransmitDirection >
      < CenId > cen - nh98vzx8gf hlwn ****</ CenId >
      < Priority > 1 </ Priority >
    </ RouteMap >
  </ RouteMaps >
  < PageNumber > 1 </ PageNumber >
  < TotalCount > 1 </ TotalCount >
  < PageSize > 10 </ PageSize >
</ DescribeCenRouteMaps Response >
```

JSON format

```
{
  " PageNumber ": 1 ,
  " RouteMaps ":{
    " RouteMap ":[
```

```

{
  " Status ":" Active ",
  " RouteMapId ":" cenrmap - jumdfzmj5s ggg1 ****",
  " CenRegionI d ":" cn - beijing ",
  " MapResult ":" Permit ",
  " TransmitDi rection ":" RegionIn ",
  " CenId ":" cen - nh98vzx8gf hlwn ****",
  " Priority ": 20
}
],
" TotalCount ": 1 ,
" PageSize ": 10
}

```

Errors

For a list of error codes, visit the [API Error Center](#).

13.3 ModifyCenRouteMap

Modifies a routing policy.


Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

| Parameter | Type | Required ? | Example value | Description |
|-----------------|--------|---------------|------------------------|---|
| CenId | String | Yes | cen-7qthudw0ll6jmc**** | The ID of the CEN instance. |
| CenRegionI d | String | Yes | cn-hangzhou | The region of the CEN instance. To query the region ID, call DescribeRegions . |


| Parameter | Type | Required? | Example value | Description |
|--------------|---------|-----------|---------------|--|
| MapResult | String | Yes | Permit | <p>The result action of the routing policy. Valid values:</p> <ul style="list-style-type: none"> · Permit: If a route matches all the matching conditions on the node, corresponding executions are performed and the route is allowed. If a route fails to match any matching condition on the node, the next node is checked to see if the route matches the conditions in this next node. · Deny: If a route matches all the matching conditions on the node, the route is rejected and the matching process ends immediately. If a route fails to match any matching condition on the node, the next node is checked to see if the route matches the conditions in this next node. |
| NextPriority | Integer | Yes | 20 | <p>The priority of the next associated routing policy node. Value range: 1 to 100</p> |


| Parameter | Type | Required ? | Example value | Description |
|-----------------|---------|---------------|---------------------------------|--|
| Priority | Integer | Yes | 10 | <p>The priority of the routing policy node. Value range: 1 to 100. A smaller number represents a higher priority.</p> <div style="background-color: #f0f0f0; padding: 5px;">  Note: The priorities of nodes in the same region and the same direction must be unique. When a route is processed, the node with the highest priority is checked first to see if the route matches the matching conditions on the node. Therefore, we recommend that you specify an appropriate priority for each node. </div> |
| RouteMapId | String | Yes | cenrmap- abcdedfghij **** | The ID of the routing policy. |
| Action | String | No | ModifyCenR outeMap | Optional. The name of this action. Value: ModifyCenR outeMap |
| AsPathMatchMode | String | No | Include | <p>Optional. The as-path matching mode as a matching condition . Valid values:</p> <ul style="list-style-type: none"> · Include: Indicates fuzzy matching. · Complete: Indicates exact matching. |

| Parameter | Type | Required ? | Example value | Description |
|-------------------------------|------------|------------|---------------|--|
| CidrMatchMode | String | No | Include | Optional. The prefix matching mode as a matching condition. Valid values: <ul style="list-style-type: none"> · Include: Indicates fuzzy matching. · Complete: Indicates exact matching. |
| CommunityMatchMode | String | No | Include | Optional. The community attribute matching mode as a matching condition. Valid values: <ul style="list-style-type: none"> · Include: Indicates fuzzy matching. · Complete: Indicates exact matching. |
| CommunityOperateMode | String | No | Additive | Optional. The operation on the community attribute as an execution. Valid values: <ul style="list-style-type: none"> · Additive: Set a value for the community attribute. · Replace: Modify the value of the community attribute. |
| Description | String | No | test | Optional. The description of the routing policy. |
| DestinationChildInstanceTypes | RepeatList | No | VPC,VBR,CCN | Optional. The target instance type as a matching condition. Valid values: VPC VBR CCN . Separate multiple instance types by using commas (,). |

| Parameter | Type | Required ? | Example value | Description |
|------------------------------------|------------|------------|------------------------|--|
| DestinationCidrBlocks . N | RepeatList | No | 1.1.1.0/10, 2.0.0.0/16 | Optional. The prefix as a matching condition. Use the CIDR notation. Separate multiple CIDR blocks by using commas (.). Up to 32 CIDR blocks can be entered. |
| DestinationInstanceIds . N | RepeatList | No | vpc-a, vpc-b, vbr-a | Optional. The target instance ID as a matching condition. Separate multiple instance IDs by using commas (.). Up to 32 instance IDs can be entered. |
| DestinationInstanceIdsReverseMatch | Boolean | No | false | Optional. The matching method of the DestinationInstanceIds matching condition. Valid values: <ul style="list-style-type: none"> · false (default): If the destination instance ID contained in a route is included in DestinationInstanceIds, the route does not match the node. · true: If the destination instance ID contained in a route is not included in DestinationInstanceIds, the route matches the node. |

| Parameter | Type | Required ? | Example value | Description |
|------------------------------|------------|------------|---------------|--|
| DestinationRouteTableIds . N | RepeatList | No | vtb-a, vtb-b | Optional. The target route table ID as a matching condition. Separate multiple route table IDs by using commas (.). Up to 32 route table IDs can be entered. |
| MatchAsns . N | RepeatList | No | 65501 | Optional. The as-path as a matching condition. Only AS SEQUENCE is supported. AS SET, AS CONFED SEQUENCE, and AS CONFED SET are not supported. Specifically, only a list of AS numbers are supported. Sets and sub-lists are not supported. |

| Parameter | Type | Required ? | Example value | Description |
|-----------------------|------------|------------|-----------------------|---|
| MatchCommunitySet . N | RepeatList | No | 65501:1,65001:2,60011 | <p>Optional. The communities of a matched route. This parameter is a matching condition. The format of each community is nn:nn. Value range of nn: 1 to 65535. Separate multiple communities by using commas (,). Up to 32 communities can be entered. Communities must comply with RFC 1997. Large communities (RFC 8092) are not supported.</p> <div style="background-color: #f0f0f0; padding: 5px; border: 1px solid #ccc;">  Note: Community configuration errors may cause a problem that the route cannot be published to the on-premises data center. </div> |

| Parameter | Type | Required ? | Example value | Description |
|----------------------------|------------|------------|---------------------------|--|
| OperateCommunitySet . N | RepeatList | No | 65501:1,65001: 2,60011 | <p>Optional. The communities on which you perform operations. This parameter is an execute statement. The format of each community is nn:nn. Value range of nn: 1 to 65535. Separate multiple communities by using commas (.). Up to 32 communities can be entered. Communities must comply with RFC 1997. Large communities (RFC 8092) are not supported.</p> <div style="background-color: #f0f0f0; padding: 5px; border: 1px solid #ccc;">  Note: Community configuration errors may cause a problem that the route cannot be published to the on-premises data center. </div> |
| Preference | Integer | No | 22 | <p>Optional. The priority of a matched route to be modified. Value range: 1 to 100. Default value: 50. The smaller the value is, the higher the priority is.</p> <p>Routing priorities: the length of BGP as_path (a shorter as_path represents a higher priority) > routes in the local region > routes learnt from other regions > routes modified through routemap</p> |

| Parameter | Type | Required ? | Example value | Description |
|------------------------------|------------|------------|---------------------|---|
| RouteTypes . N | RepeatList | No | System, Custom, BGP | <p>Optional. The route type as a matching condition. Valid values:</p> <ul style="list-style-type: none"> • System: Indicates system routes. • Custom: Indicates user routes. • BGP: Indicates BGP routes. <p>You can set multiple types. Separate multiple types by using commas (,).</p> |
| SourceChildInstanceTypes . N | RepeatList | No | VPC, VBR, CCN | <p>Optional. The source instance type as a matching condition. Valid values: VPC VBR CCN . Separate multiple instance types by using commas (,).</p> |
| SourceInstanceIds . N | RepeatList | No | vpc-a, vpc-b, vbr-a | <p>Optional. The source instance ID as a matching condition. Separate multiple instance IDs by using commas (,). Up to 32 instance IDs can be entered.</p> |

| Parameter | Type | Required ? | Example value | Description |
|-------------------------------|------------|------------|-------------------------|---|
| SourceInstanceIdsReverseMatch | Boolean | No | false | Optional. The matching method of the SourceInstanceIds matching condition. Valid values: <ul style="list-style-type: none"> · false (default): If the source instance ID contained in a route is included in SourceInstanceIds, the route does not match the node. · true: If the source instance ID contained in a route is not included in SourceInstanceIds, the route matches the node. |
| SourceRegionIds . N | RepeatList | No | cn-beijing, cn-hangzhou | Optional. The source region ID as a matching condition. Separate multiple region IDs by using commas (.). Up to 32 region IDs can be entered. |
| SourceRouteTableIds . N | RepeatList | No | vtb-a, vtb-b | Optional. The source route table ID as a matching condition. Separate multiple route table IDs by using commas (.). Up to 32 route table IDs can be entered. |

Response parameters

| Parameter | Type | Example value | Description |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | 54B48E3D-DF70-471B-AA93-08E683A1B457 | The ID of the request. |

Examples

Request example

```
http ( s )://[ Endpoint ]/? Action = ModifyCenR outeMap
& CenId = cen - 7qthudw0ll 6jmc ****
& CenRegionI d = cn - hangzhou
& MapResult = Permit
& NextPriori ty = 20
& Priority = 10
& RouteMapId = cenmap - abcdefghi j ****
&< CommonPara meters >
```

Response examples

XML format

```
< ModifyCenR outeMapRes ponse >
  < RequestId > 62172DD5 - 6BAC - 45DF - 8D44 - xxxxxxxx </ RequestId
  >
</ ModifyCenR outeMapRes ponse >
```

JSON format

```
{
  " RequestId ":" 62172DD5 - 6BAC - 45DF - 8D44 - xxxxxxxx "
}
```

Errors

For a list of error codes, visit the [API Error Center](#).

13.4 DeleteCenRouteMap

Deletes a routing policy.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

| Parameter | Type | Required ? | Example value | Description |
|-----------|--------|---------------|------------------------|---|
| CenId | String | Yes | cen-7qthudw0ll6jmc**** | The ID of the CEN instance for which the routing policy is created. |

| Parameter | Type | Required ? | Example value | Description |
|-------------|--------|------------|--------------------------------|--|
| CenRegionId | String | Yes | cn-hangzhou | The region of the CEN instance. To query the region ID, call DescribeRegions . |
| RouteMapId | String | Yes | cenrmap- abcdedfghj **** | The ID of the routing policy. |
| Action | String | No | DeleteCenRouteMap | Optional. The name of this action. Value: DeleteCenRouteMap |

Response parameters

| Parameter | Type | Example value | Description |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | 5903EE99-D542-4E14-BC65-AAC1CB2D3D03 | The ID of the request. |

Examples

Request example

```
https://cn-hangzhou.aliyuncs.com/?Action=DeleteCenRouteMap
&CenId=cen-7qthudw0ll6jm****
&CenRegionId=cn-hangzhou
&RouteMapId=cenrmap-abcdedfghj****
&<CommonParameters>
```

Response examples

XML format

```
<DeleteCenRouteMapResponse>
  <RequestId>5903EE99-D542-4E14-BC65-AAC1CB2D3D03</RequestId>
</DeleteCenRouteMapResponse>
```

JSON format

```
{
  "RequestId": "5903EE99-D542-4E14-BC65-AAC1CB2D3D03"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

14 PrivateZone

14.1 RoutePrivateZoneInCenToVpc

Sets the PrivateZone service.

PrivateZone is a VPC-based resolution and management service for private domain names. Networks in a Cloud Enterprise Network (CEN) instance can access the PrivateZone service through CEN.

Debug

[Use OpenAPI Explorer to perform debug operations and generate SDK code examples.](#)

Request parameters

| Parameter | Type | Required? | Example value | Description |
|----------------|--------|-----------|------------------------|--|
| AccessRegionId | String | Yes | cn-hangzhou | The access region. The access region is the region of the cloud resource that accesses the PrivateZone service through CEN. |
| CenId | String | Yes | cen-7qthudw0ll6jmc**** | The ID of the CEN instance. |
| HostRegionId | String | Yes | cn-hangzhou | The service region. The service region is the target region of the PrivateZone service to be accessed through CEN. |
| HostVpcId | String | Yes | cn-hangzhou | The VPC that belongs to the service region. |

| Parameter | Type | Required ? | Example value | Description |
|-----------|--------|---------------|-----------------------------|---|
| Action | String | No | RoutePrivateZoneInCentToVpc | Optional. The name of this action. Value: RoutePrivateZoneInCentToVpc |

Response parameters

| Parameter | Type | Example value | Description |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | C0245BEF-52AC-44A8-A776-EF96FD26A5CA | The ID of the request. |

Examples

Request example

```
http ( s )://[ Endpoint ]/? Action = RoutePrivateZoneInCentToVpc
& AccessRegionId = cn - hangzhou
& CenId = cen - 7qthudw0ll 6jmc ****
& HostRegionId = cn - hangzhou
& HostVpcId = cn - hangzhou
&< CommonParameters >
```

Response examples

XML format

```
< RoutePrivateZoneInCentToVpcResponse >
  < RequestId > A278B8A6 - A5B8 - 4FDE - 9F70 - 95F0F6A1D6 8A
</ RequestId >
</ RoutePrivateZoneInCentToVpcResponse >
```

JSON format

```
{
  " RequestId ":" C0245BEF - 52AC - 44A8 - A776 - EF96FD26A5 CA "
}
```

Errors

For a list of error codes, visit the [API Error Center](#).

14.2 DescribeCenPrivateZoneRoutes

Queries the details of the PrivateZone service.

Debug

[Use OpenAPI Explorer to perform debug operations and generate SDK code examples.](#)

Request parameters

| Parameter | Type | Required? | Example value | Description |
|----------------|---------|-----------|------------------------------|--|
| CenId | String | Yes | cen-7qthudw0ll6jmc**** | The ID of the CEN instance. |
| AccessRegionId | String | No | cn-hangzhou | Optional. The access region. The access region is the region of the cloud resource that accesses the PrivateZone service through CEN. |
| Action | String | No | DescribeCenPrivateZoneRoutes | Optional. The name of this action. Value: DescribeCenPrivateZoneRoutes |
| HostRegionId | String | No | cn-hangzhou | Optional. The service region. The service region is the target region of the PrivateZone service accessed through CEN. |
| PageNumber | Integer | No | 10 | Optional. The page number. Default value: 1 |
| PageSize | Integer | No | 10 | Optional. The number of entries per page in the case of a paged query result. Maximum value: 50. Default value: 10 |

Response parameters

| Parameter | Type | Example value | Description |
|-----------------------|---------|--------------------------------------|--|
| CenId | String | cen-7qthudw0ll6jmc**** | The ID of the CEN instance. |
| PageNumber | Integer | 10 | The current page number. |
| PageSize | Integer | 10 | The number of entries per page. |
| PrivateZoneDnsServers | String | 100.100.xx.136/32,100.100.xx.138/32 | The DNS IP addresses of the PrivateZone service. |
| PrivateZoneInfos | | | The details of the PrivateZone service. |
| AccessRegionId | String | cn-hangzhou | The access region. The access region is the region of the cloud resource that accesses the PrivateZone service through CEN. |
| HostRegionId | String | cn-hangzhou | The service region. The service region is the target region of the PrivateZone service accessed through CEN. |
| HostVpcId | String | vpc-bp18sth14qii3pnvo**** | The VPC that belongs to the service region. |
| Status | String | Active | The status of the PrivateZone service. |
| RequestId | String | C0245BEF-52AC-44A8-A776-EF96FD26A5CA | The ID of the request. |
| TotalCount | Integer | 10 | The total number of queried entries. |

Examples

Request example

```
http ( s )://[ Endpoint ]/? Action = DescribeCe nPrivateZo
neRoutes
& CenId = cen - 7qthudw0ll 6jmc ****
&< CommonPara meters >
```

Response examples

XML format

```
< DescribeCe nPrivateZo neRoutesRe sponse >
  < PrivateZon eInfos >
    < PrivateZon eInfo >
      < Status > Active </ Status >
      < HostVpcId > vpc - bp18sth14q ii3pnvo ****</ HostVpcId >
      < AccessRegi onId > ccn - cn - shanghai </ AccessRegi onId >
    >
      < HostRegion Id > cn - hangzhou </ HostRegion Id >
    </ PrivateZon eInfo >
    < PrivateZon eInfo >
      < Status > Active </ Status >
      < HostVpcId > vpc - bp18sth14q ii3pnvo ****</ HostVpcId >
      < AccessRegi onId > cn - hangzhou </ AccessRegi onId >
      < HostRegion Id > cn - hangzhou </ HostRegion Id >
    </ PrivateZon eInfo >
  </ PrivateZon eInfos >
  < PageNumber > 1 </ PageNumber >
  < TotalCount > 2 </ TotalCount >
  < PageSize > 10 </ PageSize >
  < PrivateZon eDnsServer s > 100 . 100 . xx . 136 / 32 , 100 . 100
. xx . 138 / 32 </ PrivateZon eDnsServer s >
  < RequestId > 461EC1B5 - 04A8 - 4706 - 8764 - 8F5BCEF48A 6F </
RequestId >
</ DescribeCe nPrivateZo neRoutesRe sponse >
```

JSON format

```
{
  " PrivateZon eInfos ":{
    " PrivateZon eInfo ":[
      {
        " Status ":" Active ",
        " HostVpcId ":" vpc - bp18sth14q ii3pnvo ****",
        " AccessRegi onId ":" ccn - cn - shanghai ",
        " HostRegion Id ":" cn - hangzhou "
      },
      {
        " Status ":" Active ",
        " HostVpcId ":" vpc - bp18sth14q ii3pnvo ****",
        " AccessRegi onId ":" cn - hangzhou ",
        " HostRegion Id ":" cn - hangzhou "
      }
    ]
  },
  " PageNumber ": 1 ,
  " TotalCount ": 2 ,
```

```

" PrivateZoneDnsServers ": " 100 . 100 . xx . 136 / 32 , 100 . 100 . xx . 138 / 32 ",
" PageSize ": 10 ,
" RequestId ": " 461EC1B5 - 04A8 - 4706 - 8764 - 8F5BCEF48A 6F "
}

```

Errors

For a list of error codes, visit the [API Error Center](#).

14.3 UnroutePrivateZoneInCenToVpc

Deletes a PrivateZone entry.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

| Parameter | Type | Required? | Example value | Description |
|----------------|--------|-----------|------------------------------|--|
| AccessRegionId | String | Yes | cn-hangzhou | The access region. The access region is the region of the cloud resource that accesses the PrivateZone service through CEN. |
| CenId | String | Yes | cen-7qthudw0ll6jmc**** | The ID of the CEN instance. |
| Action | String | No | UnroutePrivateZoneInCenToVpc | Optional. The name of this action. Value: UnroutePrivateZoneInCenToVpc |

Response parameters

| Parameter | Type | Example value | Description |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | C0245BEF-52AC-44A8-A776-EF96FD26A5CA | The ID of the request. |

Examples

Request example

```
http ( s )://[ Endpoint ]/? Action = UnroutePri vateZoneIn
  CenToVpc
& AccessRegi onId = cn - hangzhou
& CenId = cen - 7qthudw0ll 6jmc ****
&< CommonPara meters >
```

Response examples

XML format

```
< UnroutePri vateZoneIn CenToVpcRe sponse >
  < RequestId > A278B8A6 - A5B8 - 4FDE - 9F70 - 95F0F6A1D6 8A </
  RequestId >
</ UnroutePri vateZoneIn CenToVpcRe sponse >
```

JSON format

```
{
  " RequestId ":" C0245BEF - 52AC - 44A8 - A776 - EF96FD26A5 CA "
}
```

Errors

For a list of error codes, visit the [API Error Center](#).