

Alibaba Cloud Virtual Private Cloud

API reference

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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 Instance_ID</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>switch {stand slave}</code>

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1 API overview

This document summarizes all callable VPC APIs. For detailed API information, see related documents. For more information, see [API Explorer](#).

VPC

API	Description
CreateVpc	Create a VPC.
DeleteVpc	Delete a VPC.
DescribeVpcs	Query created VPCs.
ModifyVpcAttribute	Modify the name and description of a VPC.

Router interface

API	Description
DescribeVRouters	Query the list of VRouters in a region.
ModifyVRouterAttribute	Modify the name and description of a VRouter.

VSwitch

API	Description
CreateVSwitch	Create a VSwitch.
DeleteVSwitch	Delete a VSwitch.
DescribeVSwitches	Query created VSwitches.
ModifyVSwitchAttribute	Modify the name and description of a VSwitch.

Route table

API	Description
CreateRouteEntry	Create a custom route entry on a VRouter or VBR.
DeleteRouteEntry	Delete a route entry in the route table of a VRouter or VBR.
DescribeRouteTables	Query route entries in a route table.

EIP

API	Description
AllocateEipAddress	Create an EIP.
AssociateEipAddress	Bind an EIP to a cloud product instance in the same region.
UnassociateEipAddress	Unbind an EIP from a cloud product instance.
DescribeEipAddresses	Query created EIPs in a region.
ModifyEipAddressAttribute	Modify the name, description, and peak bandwidth of an EIP.
ReleaseEipAddress	Release an EIP.

NAT Gateway

API	Description
CreaeNatGateway	Create a NAT Gateway.
DescribeNatGateways	Query created NAT Gateways.
ModifyBandwidthPackageSpec	Modify a NAT Gateway.
ModifyNatGatewayAttribute	Modify the configurations of a NAT Gateway.
DeleteNatGateway	Delete a NAT Gateway.
CreateBandwidthPackage	Create a NAT bandwidth package.
DescribeBandwidthPackages	Query NAT bandwidth packages in a region.
ModifyBandwidthPackageSpec	Modify the bandwidth of a NAT bandwidth package.
ModifyBandwidthPackageAttribute	Modify the name and description of a NAT bandwidth package.
AddBandwidthPackageIps	Modify a NAT bandwidth package-Add public IPs.
RemoveBandwidthPackageIps	Modify a NAT bandwidth package-Remove public IPs.
DeleteBandwidthPackage	Delete a NAT bandwidth package.
CreateForwardEntry	Add a DNAT entry in a DNAT table.
DescribeForwardTableEntries	Query created DNAT entries.

API	Description
ModifyForwardEntry	Modify a DNAT entry.
DeleteForwardEntry	Delete a DNAT entry.
CreateSnatEntry	Add an SNAT entry in a SNAT table.
DescribeSnatTableEntries	Query created SNAT entries in a SNAT table.
ModifySnatEntry	Modify an SNAT entry.
DeleteSnatEntry	Delete an SNAT entry.

VPN Gateways

API	Description
CreateVpnGateway	Create a VPN Gateways.
DescribeVpnGateways	Query created VPN Gateways.
DescribeVpnGateway	Query the detailed information of a VPN Gateways.
ModifyVpnGatewayAttribute	Modify the name and description of a VPN Gateways.
DeleteVpnGateway	Delete a VPN Gateways.
CreateCustomerGateway	Create a customer gateway.
DescribeCustomerGateways	Query created customer gateways.
DescribeCustomerGateway	Query the detailed information of a customer gateway.
DeleteCustomerGateway	Delete a customer gateway.
ModifyCustomerGatewayAttribute	Modify the name and description of a customer gateway.
CreateVpnConnection	Create an IPSec-VPN connection.
DescribeVpnConnections	Query created IPSec-VPN connections.
DescribeVpnConnection	Query the detailed information of an IPSec-VPN connection.
ModifyVpnConnectionAttribute	Modify the configurations of an IPSec-VPN connection.
DeleteVpnConnection	Delete an IPSec-VPN connection.
DownloadVpnConnectionConfig	Obtain the configurations of an IPSec-VPN connection.

API	Description
CreateSslVpnServer	Create an SSL-VPN server.
DescribeSslVpnServers	Query created SSL-VPN servers.
DeleteSslVpnServer	Remove an SSL-VPN server.
ModifySslVpnServer	Modify the configurations of an SSL-VPN server.
CreateSslVpnClientCert	Create an SSL-VPN client certificate.
DescribeSslVpnClientCerts	Query created SSL-VPN client certificates .
DeleteSslVpnClientCert	Delete an SSL-VPN client certificate.
ModifySslVpnClientCert	Modify the name of an SSL-VPN client certificate.

Region

API	Description
DescribeRegions	Query regions.
DescribeZones	Query zones.
DescribeAccessPoints	Query access points in a region.

Monitor

API	Description
DescribeBandwidthPackagePublicIpMonitorData	Query the monitoring data of a public IP in the NAT bandwidth package.
DescribeEipMonitorData	Query the monitoring information of an EIP.

Physical connection

API	Description
CreatePhysicalConnection	Create a physical connection.
CancelPhysicalConnection	Cancel physical connection access before the physical connection is enabled.
DescribePhysicalConnections	Query created physical connections in a region.

API	Description
ModifyPhysicalConnectionAttribute	Modify the configurations of a physical connection.
TerminatePhysicalConnection	Terminate the access of the physical connection after the physical connection is enabled. The physical connection changes to the Terminating status after the API is called and changes to the Terminated status when the process is completed.
EnablePhysicalConnection	Enable the physical connection in the Confirmed status. Then the physical connection changes to the Enabled status .
DeletePhysicalConnection	Delete a physical connection.

VBR

API	Description
CreateVirtualBorderRouter	Create a Virtual Border Router (VBR).
DeleteVirtualBorderRouter	Delete a VBR.
DescribeVirtualBorderRouters	Query created Virtual Border Routers.
DescribeVirtualBorderRoutersForPhysicalConnection	Query the Virtual Border Routers created for a physical connection.
ModifyVirtualBorderRouterAttribute	Modify the configurations of a VBR.
TerminateVirtualBorderRouter	Terminate a Virtual Border Router (VBR).
RecoverVirtualBorderRouter	Recover a terminated VBR.

Router interface

API	Description
CreateRouterInterface	Create a router interface.
DescribeRouterInterfaces	Query router interfaces in a region.
ConnectRouterInterface	The initiator router interface initiates a connection to the receiver router interface.
ActivateRouterInterface	Activate a router interface in the Inactive status.

API	Description
DeactivateRouterInterface	Deactivate a router interface.
ModifyRouterInterfaceSpec	Modify the specification of a router interface.
ModifyRouterInterfaceAttribute	Modify the configurations of a router interface.
DeleteRouterInterface	Delete a router interface.

BGP

API	Description
CreateBgpGroup	Create a BGP group for a VBR.
DescribeBgpGroups	Query created BGP groups in a region.
ModifyBgpGroupAttribute	Modify the configurations of a BGP group .
DeleteBgpGroup	Delete a BGP group.
CreateBgpPeer	Add a BGP peer to a BGP group.
DescribeBgpPeers	Query the BGP peers in a region.
DeleteBgpPeer	Delete a BGP peer.
AddBgpNetwork	Advertise a BGP network.
DeleteBgpNetwork	Delete an advertised BGP network.
DescribeBgpNetworks	Query advertised BGP networks.

Global Acceleration

API	Description
CreateGlobalAccelerationInstance	Create a Global Acceleration instance.
DescribeGlobalAccelerationInstances	Query the list of created Global Acceleration instances.
ModifyGlobalAccelerationInstanceAttributes	Modify the name and description of a Global Acceleration instance.
ModifyGlobalAccelerationInstanceSpec	Modify the bandwidth of a Global Acceleration instance.
DeleteGlobalAccelerationInstance	Delete a Global Acceleration instance.

API	Description
AssociateGlobalAccelerationInstance	Bind a Global Acceleration instance to a backend server.
UnassociateGlobalAccelerationInstance	Unbind a Global Acceleration instance from the associated backend server.
DescribeServerRelatedGlobalAccelerationInstances	Query Global Acceleration instances bound to a backend server.

2 Call VPC APIs

When a VPC API is called, an HTTP GET request is sent to the endpoint of VPC APIs. You must add corresponding request parameters in the request according to the API description. After the calling, the system returns the handling result. The request and response results are encoded using the UTF-8 character set.

Request structure

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

The request structure is as follows:

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

Where:

- **Endpoint** : The endpoint of VPC APIs is `vpc . aliyuncs . com` .
- **Action** : The action to perform. For example, call `DescribeVpcs` to query all the created VPCs.
- **Version** : The version of the API to use. The current VPC API version is `2016 - 04 - 28` .
- **Parameters** : Request parameters. Use “&” to separate multiple parameters.

Request parameters consist of common parameters and API specific parameters. Common parameters include VPI version, credentials, and so on.

The following is an example using the `DescribeVpcs` API to query the created VPCs:



Note:

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

```
https :// vpc . aliyuncs . com /? Action = DescribeVp  cs
& Format = xml
& Version = 2014 - 05 - 15
& 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

To ensure the security of your API, you must sign the API request. Alibaba Cloud uses the signature in the request to verify the identity of the person who calls the API.

VPC uses AccessKey ID and AccessKey Secret for symmetrical encryption to verify the identity of the requester. 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= CT9X0VtwR8 6fNWSnsc6v 8YG0juE % 3D & SignatureN once =
3ee8c1b8 - 83d3 - 44af - a94f - 4e0ad82fd6 cf
```

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

```
http :// vpc . aliyuncs . com /? Action = DescribeVp cs
& Timestamp = 2016 - 02 - 23T12 : 46 : 24Z
& Format = XML
& AccessKeyI d = testid
& SignatureM ethod = HMAC - SHA1
& SignatureN once = 3ee8c1b8 - 83d3 - 44af - a94f - 4e0ad82fd6 cf
& Version = 2014 - 05 - 26
& SignatureV ersion = 1 . 0
```

Follow these steps to calculate the signature:

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

```
GET &% 2F & AccessKeyI d % 3Dtestid & Action % 3DDescribe
Vpcs & Format % 3DXML & SignatureM ethod % 3DHMAC - SHA1 &
```

```
SignatureN once % 3D3ee8c1b8 - 83d3 - 44af - a94f - 4e0ad82fd6 cf
& SignatureV ersion % 3D1 . 0 & TimeStamp % 3D2016 - 02 - 23T12 %
253A46 % 253A24Z & Version % 3D2014 - 05 - 15
```

.

2. Calculate the HMAC value 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 & amp` ;.

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

3. Add the signature to the request parameters:

```
http :// vpc . aliyuncs . com /? Action = DescribeVp cs
& Timestamp = 2016 - 02 - 23T12 : 46 : 24Z
& Format = XML
& AccessKeyI d = testid
& SignatureM ethod = HMAC - SHA1
& SignatureN once = 3ee8c1b8 - 83d3 - 44af - a94f - 4e0ad82fd6 cf
& Version = 2014 - 05 - 26
& SignatureV ersion = 1 . 0
& Signature = CT9X0VtwR8 6fNWSnsc6v 8YG0juE % 3D
```

3 Common parameters

Common request parameters

The following table describes common request parameters used in most Alibaba Cloud APIs.

Table 3-1: Common request parameters

Parameter	Type	Required?	Description
Format	String	No	The format of the response. Valid values: JSON (default) XML
Version	String	Yes	The version of the API. It uses the date format <code>YYYY-MM-DD</code> . Valid value: 2016-04-28
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	The time at which the request is signed. It uses the format: <code>YYYY-MM-DDThh:mm:ssZ</code> . For example, 2013-01-10T12:00:00Z.
SignatureVersion	String	Yes	The signature version to use. Valid value: 1.0
SignatureNonce	String	Yes	A random number for the signature to prevent from network attacks. Different random numbers must be used for different requests.

Common response parameters

Alibaba Cloud API responses all use a unified format. A status code of the format 2xx indicates a successful call, and a status code of the 4xx or 5xx format indicates a failed call. For successful calls, returned data can be in a XML or JSON format. You can specify the format of the returned data when sending a request. The default format is XML.

A `RequestId` is returned no matter if it is successful or not.

- XML format

```
<? xml version =" 1 . 0 " encoding =" utf - 8 "? >
<!-- The root node of the result -->
< Action + Response >
    <!-- The returned result -->
    < RequestId > 4C467B38 - 3910 - 447D - 87BC - AC049166F2 16
</ RequestId >
    <!-- The returned result -->
</ Action + Response >
```

- JSON format

```
{
  " RequestId ":" 4C467B38 - 3910 - 447D - 87BC - AC049166F2 16
",
  /* The returned result */
}
```

4 RAM authentication

Before a RAM user can call VPC APIs, the primary account must grant the RAM user the corresponding permission by creating an authentication policy. In the authentication policy, an Alibaba Cloud Resource Name (ARN) is used as the unique identifier of the resource to authorize. This topic overviews ARNs used as unique identifiers of VPC resources.

VPC resources

The following table lists VPC resources that can be authorized and the corresponding ARN formats. For the following ARN formats, \$regionid/accountid/vrouterid is the resource ID, and * represents all corresponding resources.

Resource	ARN formats
VPC	acs : vpc :\$ regionid :\$ accountid : vpc /\$ vpcid
	acs : vpc :\$ regionid :\$ accountid : vpc /*
	acs : vpc :*: \$ accountid : vpc /*
	acs : slb :*:*: loadbalanc er /*
VRouter	acs : vpc :\$ regionid :\$ accountid : vrouter /\$ vrouterid
	acs : vpc :\$ regionid :\$ accountid : vrouter /*
	acs : vpc :*: \$ accountid : vrouter /*
VSwitch	acs : vpc :\$ regionid :\$ accountid : vswitch /\$ vswitchid
	acs : vpc :\$ regionid :\$ accountid : vswitch /*
	acs : vpc :*: \$ accountid : vswitch /*
Route Table	acs : vpc :\$ regionid :\$ accountid : routetable /\$ routetable id
	acs : vpc :\$ regionid :\$ accountid : routetable /*
	acs : vpc :*: \$ accountid : routetable /*
HaVip	acs : vpc :\$ regionid :\$ accountid : havip /\$ havipid
	acs : vpc :\$ regionid :\$ accountid : havip /*

Resource	ARN formats
	acs : vpc :*: \$ accountid : havip /*
EIP	acs : vpc :\$ regionid :\$ accountid : eip /\$ allocation id
	acs : vpc :\$ regionid :\$ accountid : eip /*
	acs : vpc :*: \$ accountid : eip /*
NAT Gateway	acs : vpc :\$ regionid :\$ accountid : natgateway /\$ natgateway id
	acs : vpc :\$ regionid :\$ accountid : natgateway /*
	acs : vpc *: \$ accountid : vpc /*
NAT Gateway Bandwidth Package	acs : vpc :\$ regionid :\$ accountid : bandwidthp ackage /\$ bandwidthp ackageid
	acs : vpc :\$ regionid :\$ accountid : bandwidthp ackage /*
	aacs : vpc :*: \$ accountid : vpc /*
Forward Table	acs : vpc :\$ regionid :\$ accountid : forwardtab le /\$ forwardtab leid
	acs : vpc :\$ regionid :\$ accountid : forwardtab le /*
	acs : vpc :*: \$ accountid : vpc /*
SNAT Table	acs : vpc :\$ regionid :\$ accountid : snattable /\$ snattablei d
	acs : vpc :\$ regionid :\$ accountid : snattable /*
	acs : vpc :*: \$ accountid : vpc /*
Customer Gateway	acs : vpc :\$ regionid :\$ accountid : customerga teway /\$ customerga tewayid
	acs : vpc :\$ regionid :\$ accountid : customerga teway /*
	acs : vpc :*: \$ accountid : customerga teway /*
IPsec Connection	acs : vpc :\$ regionid :\$ accountid : vpnconnect ion /\$ vpnconnect ionid
	acs : vpc :\$ regionid :\$ accountid : vpnconnect ion /*

Resource	ARN formats
	<code>acs : vpc :*: \$ accountid : vpnconnect ion /*</code>
VPN Gateway	<code>acs : vpc :\$ regionid :\$ accountid : vpngateway /\$ vpngateway id</code>
	<code>acs : vpc :\$ regionid :\$ accountid : vpngateway /*</code>
	<code>acs : vpc :*: \$ accountid : vpngateway /*</code>
Global Acceleration Instance	<code>acs : vpc :\$ regionid :\$ accountid : globalaccelerationinstance /\$ globalaccelerationinstanceid</code>
	<code>acs : vpc :\$ regionid :\$ accountid : globalaccelerationinstance /*</code>
	<code>acs : vpc :*: \$ accountid : globalaccelerationinstance /*</code>
General Expression	<code>acs : vpc :\$ regionid :\$ accountid :*</code>
	<code>acs : vpc :*: \$ accountid :*</code>

VPC APIs

The following table lists the ARN formats of the APIs that can be authorized.

Where `$ regionid / accountid / vrouterid` is the resource ID, and `*` represents the corresponding resource.

API	ARN format
CreateVpc	<code>acs : vpc :\$ regionid :\$ accountid : vpc /*</code>
DeleteVpc	<code>acs : vpc :\$ regionid :\$ accountid : vpc /\$ vpcid</code>
DescribeVpcs	<code>acs : vpc :\$ regionid :\$ accountid : vpc /*</code>
ModifyVpcAttribute	<code>acs : vpc :\$ regionid :\$ accountid : vpc /\$ vpcid</code>
DescribeVRouters	<code>acs : vpc :\$ regionid :\$ accountid : vrouter /*</code>
	Specify the VRouterId to query: <code>" vpc : Vpc ":" acs : vpc :\$ regionid :\$ accountid : vpc /\$ vpcid "</code>

API	ARN format
	The VRouterId is not specified: <pre>" vpc : Vpc ":" acs : vpc :\$ regionid :\$ accountid : vpc /*"</pre>
ModifyVRouterAttribute	<pre>acs : vpc :*: \$ accountid :*</pre>
CreateVSwitch	<pre>acs : vpc :\$ regionid :\$ accountid : vswitch /*</pre>
	<pre>acs : vpc :\$ regionid :\$ accountid : vpc /\\$ vpcid</pre>
DeleteVSwitch	<pre>acs : vpc :\$ regionid :\$ accountid : vswitch /\\$ vswitchid</pre>
DescribeVSwitches	<pre>acs : vpc :\$ regionid :\$ accountid : vswitch /*</pre>
	<pre>" vpc : Vpc ":" acs : vpc :\$ regionid :\$ accountid : vpc /\\$ vpcid "</pre>
ModifyVSwitchAttribute	<pre>acs : vpc :\$ regionid :\$ accountid : vswitch /\\$ vswitchid</pre>
CreateRouteEntry	<pre>acs : vpc :\$ regionid :\$ accountid : routetable /\\$ routetable id</pre>
DeleteRouteEntry	<pre>acs : vpc :\$ regionid :\$ accountid : routetable /\\$ routetable id</pre>
DescribeRouteTables	<pre>acs : vpc :\$ regionid :\$ accountid : routetable /*</pre>
	<pre>" vpc : VRouter ":" acs : vpc \$ regionid :\$ accountid : vrouter /\\$ vrouterid "</pre>
CreateHaVip	<pre>acs : vpc :\$ regionid :\$ accountid : havip /*</pre>
	<pre>acs : vpc :\$ regionid :\$ accountid : vswitch /\\$ vswitchid</pre>
DeleteHaVip	<pre>acs : vpc :\$ regionid :\$ accountid : havip /\\$ havipid</pre>
AssociateHaVip	<pre>acs : vpc :\$ regionid :\$ accountid : havip /\\$ havipid</pre>

API	ARN format
	<code>acs : vpc : % s : % s : certificat e / %</code>
	<code>acs : ecs : \$ regionid : \$ accountid : instance / \$ instanceid</code>
UnassociateHaVip	<code>acs : vpc : \$ regionid : \$ accountid : havip /\$ havipid</code>
	<code>acs : ecs : \$ regionid : \$ accountid : instance / \$ instanceid</code>
DescribeHaVips	<code>acs : vpc : \$ regionid : \$ accountid : havip /*</code>
AllocateEipAddress	<code>acs : vpc : \$ regionid : \$ accountid : eip /*</code>
AssociateEipAddress	<code>acs : vpc : \$ regionid : \$ accountid : eip /*</code>
	Attach an ECS instance <code>acs : vpc : \$ regionid : \$ accountid : eip / \$ allocation id</code> <code>acs : ecs : \$ regionid : \$ accountid : instance / \$ instanceid</code>
	Attach an HaVip <code>acs : vpc : \$ regionid : \$ accountid : eip / \$ allocation id</code> <code>acs : vpc : \$ regionid : \$ accountid : havip /\$ havipid</code>
DescribeEipAddresses	<code>acs : vpc : \$ regionid : \$ accountid : eip /*</code>
UnassociateEipAddress	Attach an ECS instance <code>acs : vpc : \$ regionid : \$ accountid : eip / \$ allocation id</code> <code>acs : ecs : \$ regionid : \$ accountid : instance / \$ instanceid</code>

API	ARN format
	Attach an HaVip <code>acs : vpc : \$ regionid : \$ accountid : eip / \$ allocation id</code> <code>acs : vpc : \$ regionid : \$ accountid : havip / \$ havipid</code>
ReleaseEipAddress	<code>acs : vpc : \$ regionid : \$ accountid : eip / \$ allocation id</code>
DescribeEipMonitorData	<code>acs : vpc : \$ regionid : \$ accountid : eip / \$ allocation id</code>
	<code>acs : ecs : \$ regionid : \$ accountid : instance / \$ instanceid</code>
CreateNatGateway	<code>acs : vpc : \$ regionid : \$ accountid : natgateway /*</code>
DescribeNatGateways	<code>acs : vpc : \$ regionid : \$ accountid : natgateway / \$ natgateway id</code>
	<code>acs : vpc : \$ regionid : \$ accountid : natgateway /*</code>
ModifyNatGatewaySpec	<code>acs : vpc : \$ regionid : \$ accountid : natgateway / \$ natgateway id</code>
ModifyNatGatewayAttribute	<code>acs : vpc : \$ regionid : \$ accountid : natgateway / \$ natgateway id</code>
	<code>acs : ecs : \$ regionid : \$ accountid : instance / \$ instanceid</code>
DeleteNatGateway	<code>acs : vpc : \$ regionid : \$ accountid : natgateway / \$ natgateway id</code>
	<code>acs : ecs : \$ regionid : \$ accountid : instance / \$ instanceid</code>
CreateBandwidthPackage	<code>acs : vpc : \$ regionid : \$ accountid : bandwidthp ackage /*</code>
DescribeBandwidthPackages	<code>acs : vpc : \$ regionid : \$ accountid : bandwidthp ackage / \$ bandwidthp ackageid</code>

API	ARN format
	<code>acs : vpc :\$ regionid :\$ accountid : bandwidthp ackage /*</code>
ModifyBandwidthPacka geSpec	<code>acs : vpc :\$ regionid :\$ accountid : bandwidthp ackage /\$ bandwidthp ackageid</code>
ModifyBandwidthPacka geAttribute	<code>acs : vpc :\$ regionid :\$ accountid : bandwidthp ackage /\$ bandwidthp ackageid</code>
AddBandwidthPackageIps	<code>acs : vpc :\$ regionid :\$ accountid : bandwidthp ackage /\$ bandwidthp ackageid</code>
RemoveBandwidthPacka geIps	<code>acs : vpc :\$ regionid :\$ accountid : bandwidthp ackage /\$ bandwidthp ackageid</code>
DeleteBandwidthPackage	<code>acs : vpc :\$ regionid :\$ accountid : bandwidthp ackage /\$ bandwidthp ackageid</code>
CreateForwardEntry	<code>acs : vpc :\$ regionid :\$ accountid : forwardtab le /\$ forwardtab leid</code>
DeleteForwardEntry	<code>acs : vpc :\$ regionid :\$ accountid : forwardtab le /\$ forwardtab leid</code>
ModifyForwardEntry	<code>acs : vpc :\$ regionid :\$ accountid : forwardtab le /\$ forwardtab leid</code>
DescribeForwardTableEntries	<code>acs : vpc :\$ regionid :\$ accountid : forwardtab le /\$ forwardtab leid</code>
CreateSnatEntry	<code>acs : vpc :\$ regionid :\$ accountid : snattable /*</code>
ModifySnatEntry	<code>acs : vpc :\$ regionid :\$ accountid : snattable /\$ snattablei d</code>
DescribeSnatTableEntries	<code>acs : vpc :\$ regionid :\$ accountid : snattable /\$ snattablei d</code>
DeleteSnatEntry	<code>acs : vpc :\$ regionid :\$ accountid : snattable /\$ snattablei d</code>
CreateCustomerGateway	<code>acs : vpc :\$ regionid :\$ accountid : customerga teway /*</code>
DeleteCustomerGateway	<code>acs : vpc :\$ regionid :\$ accountid : customerga teway /\$ customerga tewayid</code>

API	ARN format
DescribeCustomerGateway	acs : vpc :\$ regionid :\$ accountid : customer-gateway /\$ customer-gateway-id
DescribeCustomerGateways	acs : vpc :\$ regionid :\$ accountid : customer-gateway /*
ModifyCustomerGatewayAttribute	acs : vpc :\$ regionid :\$ accountid : customer-gateway /\$ customer-gateway-id
CreateVpnConnection	acs : vpc :\$ regionid :\$ accountid : vpn-connection /*
DeleteVpnConnection	acs : vpc :\$ regionid :\$ accountid : vpn-connection /\$ vpn-connection-id
DescribeVpnConnection	acs : vpc :\$ regionid :\$ accountid : vpn-connection /\$ vpn-connection-id
DescribeVpnConnections	acs : vpc :\$ regionid :\$ accountid : vpn-connection /*
ModifyVpnConnectionAttribute	acs : vpc :\$ regionid :\$ accountid : vpn-connection /\$ vpn-connection-id
Downloadvpnconnectionconfig	acs : vpc :\$ regionid :\$ accountid : vpn-connection /\$ vpn-connection-id
DeleteVpnGateway	acs : vpc :\$ regionid :\$ accountid : vpn-gateway /\$ vpn-gateway-id
DescribeVpnGateway	acs : vpc :\$ regionid :\$ accountid : vpn-gateway /\$ vpn-gateway-id
DescribeVpnGateways	acs : vpc :\$ regionid :\$ accountid : vpn-gateway /*
ModifyVpnGatewayAttribute	acs : vpc :\$ regionid :\$ accountid : vpn-gateway /\$ vpn-gateway-id
CreateGlobalAccelerationInstance	acs : vpc :\$ regionid :\$ accountid : global-acceleration-instance /*
AssociateGlobalAccelerationInstance	acs : vpc :\$ regionid :\$ accountid : global-acceleration-instance /\$ global-acceleration-instance-id
	acs : ecs :\$ regionid :\$ accountid : instance /\$ instance-id

API	ARN format
UnassociateGlobalAccelerationInstance	<code>acs : ecs : \$ regionid : \$ accountid : instance / \$ instanceid</code>
ModifyGlobalAccelerationInstanceSpec	<code>acs : ecs : \$ regionid : \$ accountid : instance / \$ instanceid</code>
ModifyGlobalAccelerationInstanceAttributes	<code>acs : ecs : \$ regionid : \$ accountid : instance / \$ instanceid</code>
DeleteGlobalAccelerationInstance	<code>acs : ecs : \$ regionid : \$ accountid : instance / \$ instanceid</code>
DescribeGlobalAccelerationInstances	<code>acs : vpc : \$ regionid : \$ accountid : globalaccelerationinstance / *</code>
AddGlobalAccelerationInstanceIp	<code>acs : vpc : \$ regionid : \$ accountid : globalaccelerationinstance / \$ globalaccelerationinstanceid acs : vpc : \$ regionid : \$ accountid : eip / \$ allocation id</code>
RemoveGlobalAccelerationInstanceIp	<code>acs : vpc : \$ regionid : \$ accountid : globalaccelerationinstance / \$ globalaccelerationinstanceid acs : vpc : \$ regionid : \$ accountid : eip / \$ allocation id</code>
DescribeServerRelatedGlobalAccelerationInstances	<code>acs : vpc : \$ regionid : \$ accountid : globalaccelerationinstance / *</code>
	<code>acs : ecs : \$ regionid : \$ accountid : instance / \$ instanceid</code>

5 Error codes

You can view all error codes in the [VP API error center](#) to troubleshoot.

6 Virtual Private Cloud (VPC)

6.1 CreateVpc

Creates a VPC.

Note the following before creating a VPC:

- You must specify the IP address range of the VPC in the form of the CIDR block. You can use the standard private IP address ranges or their subnets as the CIDR block of the VPC. The size of the CIDR block mask can be 8 bits to 24 bits. The default CIDR block is 172.16.0.0/12.
- The CIDR block cannot be modified after the VPC has been created.
- The number of cloud product instances in each VPC cannot exceed 15,000.
- A VRouter and a route table are automatically created after a VPC is created.
- Up to three customer-side CIDR blocks can be added to a VPC. If one customer-side CIDR block is the subset of another CIDR block, the one with the shorter mask takes effect. For example, for the CIDR blocks 10.0.0.0/8 and 10.1.0.0/16, the customer-side CIDR block 10.0.0.0/8 is the CIDR block that takes effect.

Debug

By using [OpenAPI Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreateVpc	The name of this action. Value: CreateVpc
RegionId	String	Yes	cn-hangzhou	The region ID of the VPC to be created. To query the region ID, call DescribeRegions.

Parameter	Type	Required?	Example value	Description
CidrBlock	String	No	172.16.0.0/12	The IP address range of the VPC in the CIDR block form. You can use the following IP address ranges or their subnets: • 10 . 0 . 0 . 0 / 8 • 172 . 16 . 0 . 0 / 12 (default) • 192 . 168 . 0 . 0 / 16
ClientToken	String	No	sha223nidd2333	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.
Description	String	No	This is my first Vpc.	The description of the VPC. The description can contain 2-256 characters. It must start with an English letter, but it cannot start with <code>http://</code> or <code>https://</code>.
EnableIpv6	Boolean	No	0	Indicates whether to enable the IPv6 CIDR block. Default value: false. Valid values: false true
Ipv6CidrBlock	String	No	223.223.213.122	The IPv6 CIDK block of the VPC.

Parameter	Type	Required ?	Example value	Description
ResourceGroupId	String	No	123	The ID of the resource group.
UserCidr	String	No	189.16.0.0/12	The customer-side CIDR block. Separate multiple CIDR blocks with commas. You can add up to three CIDR blocks.
VpcName	String	No	Vpc-1	The name of the VPC. The name must be between 2 and 128 characters in length. It can contain uppercase or lowercase letters and numbers. It can also contain periods (.), underscores (_), or hyphens (-). The name must start with a letter. It cannot start with <code>http ://</code> or <code>https ://</code> .

Response parameters

Parameter	Type	Example value	Description
RequestId	String	0ED8D006-F706-4D23-88ED-E11ED28DCAC0	The ID of the request.
VpcId	String	vpc-bp15zckdt37pq72zvw30k	The ID of the VPC.
VRouterId	String	vrt-bp1lhl0tai krteen80oxx	The ID of the VRouter.
RouteTableId	String	vtb-bp145q7gln uzdvzu21pom	The ID of the route table.
ResourceGroupId	String	rg-acfmxazb4ph6aiy	The ID of the resource group.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=CreateVpc
&RegionId=cn-hangzhou
&CidrBlock=10.10.0.0/24
&CommonParameters
```

Response example

- XML format

```
<CreateVpcResponse>
  <ResourceGroupId>rg-acfmxazb4p-h6aiy</ResourceGroupId>
  <RequestId>8B2F5262-6B57-43F2-97C4-971425462D-FE</RequestId>
  <RouteTableId>vtb-bp1krxxzp0-c29fmontba-l</RouteTableId>
  <VRouterId>vrt-bp1jcg5cmx-jbl9xgc58b-w</VRouterId>
  <VpcId>vpc-bp1qpo0kug-3a20qqe9h7-v</VpcId>
</CreateVpcResponse>
```

- JSON format

```
{
  "RequestId": "8B2F5262-6B57-43F2-97C4-971425462D-FE",
  "ResourceGroupId": "rg-acfmxazb4p-h6aiy",
  "RouteTableId": "vtb-bp1krxxzp0-c29fmontba-l",
  "VpcId": "vpc-bp1qpo0kug-3a20qqe9h7-v",
  "VRouterId": "vrt-bp1jcg5cmx-jbl9xgc58b-w"
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	Specified value of "regionId" is not supported.	The specified RegionId does not exist.
400	InvalidParameter	Specified CIDR block is not valid	The CIDR block is invalid.
400	ResourceNotAvailable	Resource you requested is not available in this region or zone.	You cannot create a VSwitch in this region or zone.
400	InvalidVpcName.Malformed	Specified VPC name is not valid.	The format of the name of the specified VPC is invalid.

HTTP status code	Error code	Error message	Description
400	QuotaExceeded.Vpc	VPC quota exceeded.	The maximum number of VPCs for the account has been reached.
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource.
400	ResourceNotAvailable.Vpc	Resource you requested is not available in this region or zone.	The resource that you are requesting is not available in the region or zone.
400	InvalidVpcName.Malformed	Specified VPC name is not valid.	The format of the name of the specified VPC is invalid.
400	InvalidParameter	Specified UserCidr invalid format.	The specified CIDR block is invalid.
400	InvalidParameter	Specified UserCidr Subnet mask is not valid .	The specified subnet mask for UserCidr is invalid.
400	InvalidUserCidr.Quota	Specified UserCidr number is greater than 3.	The number of UserCidr has reached the quota.
400	InvalidUserCidr.Malformed	Specified UserCidr overlapping in of 100.64.0.0/10.	The specified UserCidr overlaps with 100.64.0.0/10.
500	InternalServerError	The request processing has failed due to some unknown error.	An error occurred while the request was being processed.

[See common errors](#)

6.2 DeleteVpc

Deletes a VPC.

Note the following before deleting a VPC:

- You must release or remove all resources in the VPC, such as VSwitches, instances, router interfaces, and HaVip.
- Only VPCs in the available status can be deleted.

Debug

By using [OpenAPI Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteVpc	The name of this action. Value: DeleteVpc
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the VPC belongs.
VpcId	String	Yes	vpc-123456	The ID of the VPC.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	0ED8D006-F706-4D23-88ED-E11ED28DCA C0	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DeleteVpc
&VpcId=vpc-123456
&<CommonParameters>
```

Response example

• XML format

```
<DeleteVpcResponse>
  <RequestId>0ED8D006-F706-4D23-88ED-E11ED28DCA C0</RequestId>
```

```
</ DeleteVpcResponse >
```

- JSON format

```
{
  "RequestId ":" 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA  C0 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	OperationDenied	The operation is not supported in this status.	This operation cannot be performed in this status.
403	OperationDenied	The snapshot creation for the specified disk is not finished yet.	The snapshot creation of the disk has not been completed yet.
400	IncorrectVpcStatus	Current VPC status does not support this operation .	The current status of VPC does not support this action.
400	Dependency Violation. RouteEntry	Specified object has dependent resources	The specified operation failed to delete the VPC due to the custom route entries added to the VPC.
400	Dependency Violation. Instance	Specified object has dependent resources	The specified object has associated resources.
400	Dependency Violation. VSwitch	Specified object has dependent resources	This VPC has dependent VSwitches and cannot be deleted. Delete all VSwitches in the VPC first.
400	Dependency Violation. SecurityGroup	Specified object has dependent resources	This VPC has dependent security groups and cannot be deleted. Delete all security groups in the VPC first.
404	InvalidVpcId. NotFound	Specified VPC does not exist.	The specified VPC does not exist.

HTTP status code	Error code	Error message	Description
400	Dependency Violation. RouteInterface	Specified object has dependent route interface .	The specified VSwitch has a router interface connected and cannot be deleted.
400	Dependency Violation.Tunnel	Specified object has dependent tunnel.	The specified object has associated tunnels.
500	InternalError	The request processing has failed due to some unknown error.	An error occurred while the request was being processed.
400	Dependency Violation. NatGateway	Specified object has dependent resources NatGateway.	The dependent NAT Gateway must be deleted first before the specified VPC can be deleted.
400	Dependency Violation. RouterInterface	Specified object has dependent resources RouterInterface.	The specified object has associated router interfaces.
400	Dependency Violation. SecurityGroup	Specified object has dependent resources SecurityGroup.	This VPC has dependent security groups and cannot be deleted. Delete all security groups in the VPC first.
400	Forbidden. VpcNotFound	Specified VPC can not found.	The specified VPC does not exist.
400	Forbbiden	Active custom route in vpc .	You need to add a custom route entry in the VPC.

[See common errors](#)

6.3 DescribeVpcs

Query the created VPCs in a region.

Request parameters

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: DescribeVpcs
RegionId	String	No	The region where the VPC is located. You can obtain the region ID by calling the DescribeRegions API.
VpcId	String	No	The ID of the VPC. Up to 20 VPCs can be specified. Separate multiple VPCs using commas.
Isdefault	Boolean	No	Whether to query the default VPC in the specified region. Valid value: · true (Default): Query all VPCs in the specified region. · false : Do not query the default VPC.
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.

Name	Type	Description
PageSize	String	The number of entries on the current page.
Vpcs	JSON string	The detailed information of the VPC.

Table 6-1: Vpc

Name	Type	Description
VpcId	String	The ID of the VPC.
RegionId	String	The region where the VPC is located.
Status	String	The status of the VPC. Valid value: • Pending : configuring • Available : available
VpcName	String	The name of the VPC.
VSwitchIds	String	A list of VSwitches in the VPC.
CidrBlock	String	The CIDR block of the VPC.
VRouterId	String	The ID of the VRouter.
Description	String	The description of the VPC.
CreationTime	String	The time when the VPC is created.
IsDefault	Boolean	Whether the VPC is the default VPC in the region.
UserCidrs	String	A list of customer-side CIDR blocks.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DescribeVpcs
&RegionId=us-west-1
&CidrBlock=10.10.0.0/24
&CommonParameters
```

Response example

- XML format

```
<? xml version =" 1 . 0 " encoding =" UTF - 8 "? >
< CreateVpcR esponse >
  < RequestId > 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 </
  RequestId >
  < RouteTable Id > vtb - bp145q7gln uzdvzu21po m </
  RouteTable Id >
  < VRouterId > vrt - bp1lhl0tai krteen80ox x </ VRouterId >
  < VpcId > vpc - bp15zckdt3 7pq72zvw3 </ VpcId >
</ CreateVpcR esponse >
```

- JSON format

```
{
  " PageNumber ": 1 ,
  " Vpcs ": {
    " VPC ":[
      {
        " VpcName ": " vpc1 ",
        " Descriptio n ": "",
        " IsDefault ": false ,
        " ResourceGr oupId ": " rg - acfmxazb4p h6aiy ",
        " UserCidrs ": {
          " UserCidr ": [ ]
        },
        " NatGateway Ids ": {
          " NatGateway Ids ": [ ]
        },
        " RouterTabl eIds ": {
          " RouterTabl eIds ": [
            " vtb - bp145q7gln uzdvzu21po m "
          ]
        },
        " VpcId ": " vpc - bp15zckdt3 7pq72zvw30 k ",
        " VRouterId ": " vrt - bp1lhl0tai krteen80ox x ",
        " CreationTi me ": " 2018 - 04 - 18T15 : 02 : 37Z "
      },
      {
        " Status ": " Available ",
        " CidrBlock ": " 10 . 0 . 0 . 0 / 24 ",
        " Vswitchids ":{
          " VSwitchId ": [ ]
        },
        " RegionId ": " cn - hangzhou "
      }
    ]
  },
  " TotalCount ": 1 ,
  " PageSize ": 10 ,
  " RequestId ": " 9B941224 - B647 - 4644 - A746 - 641906D6B9 54 "
}
```

6.4 ModifyVpcAttribute

Modifies the name and description of a VPC.

Debug

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

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Required	ModifyVpcAttribute	The name of this action. Value: ModifyVpcAttribute.
RegionId	String	Yes	cn-hangzhou	The region to which the VPC belongs.
VpcId	String	Yes	vpc-bp1qtbach57ywecfxxxxxx	The ID of the VPC.
CidrBlock	String	No	192.168.0.0/24	The CIDR block of the VPC.
Description	String	No	This is VPC1.	The description of the VPC. The description must be 2 to 256 characters in length. It must start with a letter but cannot start with <code>http://</code> or <code>https://</code> .
EnableIPv6	Boolean	No	true	Indicates whether to enable IPv6 CIDR blocks. Valid values: · true: Enable. · false: Do not enable.

Parameter	Type	Required?	Example value	Description
VpcName	String	No	Vpc-1	The name of the VPC. The instance 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. It cannot start with <code>http ://</code> or <code>https ://</code> .

Response parameters

Parameter	Type	Example value	Description
RequestId	String	0ED8D006-F706-4D23-88ED-E11ED28DCAC0	The ID of the request.

Examples

Request example

```
https :// vpc . aliyuncs . com /? Action = ModifyVpcA ttribute
& VpcId = vpc - bp1qtbach5 7ywecfxxxx xx
& VpcName = Vpc - 1
&< CommonPara meters >
```

Response example

XML format

```
< ModifyVpcA ttributeRe sponse >
  < RequestId > 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 </
  RequestId >
</ ModifyVpcA ttributeRe sponse >
```

JSON format

```
{
  " RequestId ":" 43B72D30 - 25E1 - 4FA3 - 96A8 - 89374A521D 1A "
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidVpcId.NotFound	Specified VPC does not exist.	The specified VPC does not exist.
400	InvalidVpcName.Malformed	Specified VPC name is not valid.	The name format of the specified VPC is invalid.
400	InvalidVpcDiscription.Malformed	Specified VPC description is not valid.	The format of the specified VPC description is invalid.
400	InvalidParameter	Specified UserCidr invalid format.	The format of the specified UserCidr is invalid.
400	InvalidParameter	Specified UserCidr Subnet mask is not valid.	The specified subnet mask for UserCidr is invalid.
400	InvalidUserCidr.Quota	Specified UserCidr number is greater than 3.	The number of UserCirds has reached the quota.
400	InvalidUserCidr.Malformed	Specified UserCidr overlapping in of 100.64.0.0/10.	The specified UserCird overlaps with 100.64.0.0/10.
400	IncorrectVpcStatus	Current VPC status does not support this operation.	The current VPC status does not support this operation.
400	InvalidCidrBlock.Malformed	Specified CIDR block is not valid.	The format of the specified CIDR block is invalid.

[See common error codes](#)

6.5 DescribeVpcAttribute

Queries the configurations of a VPC.

Debug

By using [OpenAPI Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeVpcAttribute	The name of this action. Value: DescribeVpcAttribute
RegionId	String	Yes	cn-hangzhou	The ID of the region where the VPC belongs.
VpcId	String	Yes	vpc-bp18sth14qii3pnvodkv-t	The ID of the VPC to be queried.
IsDefault	Boolean	No	false	Indicates whether the VPC is the default VPC. Valid values: - false : The VPC is not the default VPC. - true : The VPC is the default VPC.

Response parameters

Parameter	Type	Example value	Description
AssociatedCens	N/A	N/A	A list of CEN instances attached to the VPC.
^L CenId	String	cen-7qthudw0ll6jmc4gsu	The ID of the CEN instance.
^L CenOwnerId	Long	1231579085529123	The ID of the account to which the CEN instance belongs.
^L CenStatus	String	Attached	The status of the CEN instance.
CidrBlock	String	192.168.0.0/16	The private CIDR block of the VPC.
ClassicLinkEnabled	Boolean	false	Indicates whether the ClassicLink function is enabled.

Parameter	Type	Example value	Description
CloudResources	N/A	N/A	A list of cloud resources under the VPC.
ResourceCount	Integer	1	The number of the resources under the VPC.
ResourceType	String	VSwitch	The type of the resources under the VPC.
CreationTime	String	2018-10-16T07:31:09Z	The time at which the VPC was created.
Description	String	VPC	The description of the VPC.
Ipv6CidrBlock	String	224.223.234.233/24	The IPv6 CIDR block of the VPC.
IsDefault	Boolean	false	Indicates whether the VPC is the default VPC.
RegionId	String	cn-hangzhou	The ID of the region to which the VPC belongs.
RequestId	String	7486AE4A-129D-43DB-A714-2432C074BA04	The ID of the request.
ResourceGroupId	String	rg-acfmxazb4ph6aiy	The ID of the resource group.
Status	String	Available	The status of the VPC.
UserCidrs	N/A	172.16.0.1/24	The customer-side CIDR blocks. Separate CIDR blocks with commas. You can specify up to three CIDR blocks.
VRouterId	String	vrt-bp1jso6ng1at0ajsc8mbe	The ID of the VRouter.

Parameter	Type	Example value	Description
VSwitchIds	N/A	{ "VSwitchId": ["vsw-bp14cagpfy sr29feg5t97"] }	A list of VSwitches under the VPC.
VpcId	String	vpc-bp18sth14q ii3pnvodkvt	The ID of the VPC.
VpcName	String	doctest2	The name of the VPC.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DescribeVpcAttribute
&RegionId=cn-hangzhou
&VpcId=vpc-bp18sth14q-ii3pnvodkv-t
&<CommonParameters>
```

Response example

• XML format

```
<DescribeVpcAttributeResponse>
  <VpcName>doctest2</VpcName>
  <Description />
  <IsDefault>>false</IsDefault>
  <ResourceGroupId>rg-acfmxazb4p-h6aiy</ResourceGroupId>
  <UserCidrs />
  <ClassicLinkEnabled>>false</ClassicLinkEnabled>
  <AssociatedCens>
    <AssociatedCen>
      <CenStatus>Attached</CenStatus>
      <CenOwnerId>1231579085-529123</CenOwnerId>
      <CenId>cen-7qthudw0ll-6jmc4gsu</CenId>
    </AssociatedCen>
  </AssociatedCens>
  <VRouterId>vrt-bp1jso6ng1-at0ajsc8mb-e</VRouterId>
  <VpcId>vpc-bp18sth14q-ii3pnvodkv-t</VpcId>
  <CreationTime>2018-10-16T07:31:09Z</CreationTime>
  <CidrBlock>192.168.0.0/16</CidrBlock>
  <Status>Available</Status>
  <VSwitchIds>
    <VSwitchId>vsw-bp14cagpfy-sr29feg5t9-7</VSwitchId>
  </VSwitchIds>
  <RequestId>7486AE4A-129D-43DB-A714-2432C074BA04</RequestId>
  <RegionId>cn-hangzhou</RegionId>
  <CloudResources>
    <CloudResourceSetType>
      <ResourceType>VSwitch</ResourceType>
      <ResourceCount>1</ResourceCount>
    </CloudResourceSetType>
```

```

    < CloudResourceSetType >
      < ResourceType > VRouter </ ResourceType >
      < ResourceCount > 1 </ ResourceCount >
    </ CloudResourceSetType >
    < CloudResourceSetType >
      < ResourceType > RouteTable </ ResourceType >
      < ResourceCount > 1 </ ResourceCount >
    </ CloudResourceSetType >
  </ CloudResources >
</ DescribeVpcAttributeResponse >

```

• JSON format

```

{
  "VpcName ":" doctest2 ",
  "Description ":"",
  "IsDefault ": false ,
  "ResourceGroupID ":" rg - acfmxazb4p h6aiy ",
  "UserCidrs ":{
    "UserCidr ":[]
  },
  "ClassicLinkEnabled ": false ,
  "AssociatedCens ":{
    "AssociatedCen ":[
      {
        "CenStatus ":" Attached ",
        "CenOwnerId ":" 1231579085 529123 ",
        "CenId ":" cen - 7qthudw0ll 6jmc4gsu "
      }
    ]
  },
  "VRouterId ":" vrt - bp1jso6ng1 at0ajsc8mb e ",
  "VpcId ":" vpc - bp18sth14q ii3pnvodkv t ",
  "CreationTime ":" 2018 - 10 - 16T07 : 31 : 09Z ",
  "CidrBlock ":" 192 . 168 . 0 . 0 / 16 ",
  "Status ":" Available ",
  "VSwitchIds ":{
    "VSwitchId ":[
      "vsw - bp14cagpfy sr29feg5t9 7 "
    ]
  },
  "RegionId ":" cn - hangzhou ",
  "RequestId ":" 7486AE4A - 129D - 43DB - A714 - 2432C074BA 04 ",
  "CloudResources ":{
    "CloudResourceSetType ":[
      {
        "ResourceType ":" VSwitch ",
        "ResourceCount ": 1
      },
      {
        "ResourceType ":" VRouter ",
        "ResourceCount ": 1
      },
      {
        "ResourceType ":" RouteTable ",
        "ResourceCount ": 1
      }
    ]
  }
}

```

```
}
```

Error codes

HTTP status code	Error code	Error message	Description
500	InternalServerError	The request processing has failed due to some unknown error.	An error occurred while the request was being processed.
400	IncorrectVpcStatus	Current VPC status does not support this operation .	The status of VPC does not support this action.
404	InvalidVpcId.NotFound	Specified VPC does not exist.	The specified VPC does not exist.

[See common error codes](#)

7 VSwitch

7.1 DescribeVSwitches

Queries one or more VSwitches.

This API supports query pagination and each page contains 10 entries by default.

This API only verifies the validity of parameters and does not verify the dependency relationship between the parameters. The returned result is the intersection of all conditions.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeVSwitches	The name of this action. Value: DescribeVSwitches
RegionId	String	Yes	cn-hangzhou	The region of the VPC to which the VSwitch belongs. To query the region ID, call DescribeRegions.

Parameter	Type	Required?	Example value	Description
Isdefault	Boolean	No	true	Indicates whether to query the default VSwitch in the specified region. · true (default value): Query all VSwitches in the specified region. · false : Do not query the default VSwitch.
OwnerAccount	String	No		The owner account.
PageNumber	Integer	No	10	The number of pages to return. Default value: 1 .
PageSize	Integer	No	1	The number of rows per page. Maximum value: 50 . Default value: 10 .
ResourceGroupId	String	No	1234567	The ID of the resource group.
RouteTableId	String	No	vtb-bp145q7glnuzdvzu21pom	The ID of the route table.
VSwitchId	String	No	vsw-23dsf3xxxxxx	The ID of the VSwitch.
VSwitchName	String	No	VSwitch-1	The name of the VSwitch.
VpcId	String	No	vpc-25eq58plxxxxxxx	The ID of the VPC.

Parameter	Type	Required?	Example value	Description
ZoneId	String	No	cn-hangzhou-d	The ID of the zone to which the VSwitch belongs. To query the region ID, call DescribeZones.

Response parameters

Parameter	Type	Example value	Description
VSwitches	N/A	N/A	A list of VSwitches.
└AvailableIpAddressCount	Long	1	The number of available IP addresses in the VSwitch.
└CidrBlock	String	172.16.0.0/24	The CIDR block of the VSwitch.
└CreationTime	String	2018-01-18T12:43:57Z	The time when the VSwitch was created.
└Description	String	This is my vswitch.	The description of the VSwitch.
└Ipv6CidrBlock	String	2408:4004:0:2900::/64	The IPv6 CIDR block of the VSwitch.
└IsDefault	Boolean	true	Whether the VSwitch is the default VSwitch in the zone.
└ResourceGroupId	String	123456	The ID of the resource group to which the VSwitch belongs.
└RouteTable	N/A	N/A	The information of the route table.
└RouteTableId	String	vrt-123456	The ID of the route table associated with the VSwitch.

Parameter	Type	Example value	Description
RouteTableType	String	System	The type of the route table: - System: system route table - Custom: custom route table
Status	String	Available	The status of the VSwitch. Valid values: - Pending: being configured - Available: available
VSwitchId	String	vsw-xxxxxxxxxx xxxxxx	The ID of the VSwitch.
VSwitchName	String	VSwitch-1	The name of the VSwitch.
VpcId	String	vpc-234asxxxxx xxxxxxxx	The ID of the VPC to which the VSwitch belongs.
ZoneId	String	cn-hangzhou-d	The ID of the zone to which the VSwitch belongs.
TotalCount	Integer	10	The number of queried entries.
PageNumber	Integer	10	The current page number.
PageSize	Integer	10	The number of rows per page.
RequestId	String	9A572171-4E27-40D1-BD36-D26XXXXXXXXX	The ID of the request.

Examples

Request example

```
http ( s )://[ Endpoint ]/?< CommonParameters >
```

Response example

- XML format

```
< DescribeVS witchesRes ponse >
  < RequestId > 9A572171 - 4E27 - 40D1 - BD36 - D26C9E71E2 9E </
  RequestId >
  < VSwitches >
    < VSwitch >
      < VSwitchId > vsw - 25b7pv15t </ VSwitchId >
      < Status > Available </ Status >
      < CidrBlock > 172 . 16 . 1 . 0 / 24 </ CidrBlock >
      < ZoneId > cn - beijing - a </ ZoneId >
      < AvailableI pAddressCo unt > 246 </ AvailableI pAddressCo
unt >
      < VpcId > vpc - 257gq642n </ VpcId >
      < Descriptio n />
      < VSwitchNam e />
      < CreationTi me > 2014 - 10 - 29T15 : 21 : 02Z </
CreationTi me >
    </ VSwitch >
  </ VSwitches >
</ DescribeVS witchesRes ponse >
```

- JSON format

```
{
  " PageNumber ": 1 ,
  " VSwitches ":{
    " VSwitch ":[
      {
        " CreationTi me ":" 2014 - 10 - 29T15 : 21 : 02Z ",
        " Status ":" Available ",
        " CidrBlock ":" 172 . 16 . 1 . 0 / 24 ",
        " Descriptio n ":"",
        " AvailableI pAddressCo unt ": 246 ,
        " VSwitchNam e ":"",
        " ZoneId ":" cn - beijing - a ",
        " VSwitchId ":" vsw - 25b7pv15t ",
        " VpcId ":" vpc - 257gq642n "
      }
    ]
  },
  " TotalCount ": 1 ,
  " PageSize ": 10 ,
  " RequestId ":" 9A572171 - 4E27 - 40D1 - BD36 - D26C9E71E2 9E "
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidVSwitchId.NotFound	VSwitch not exist.	The specified VSwitch does not exist.
400	Forbidden.VpcNotFound	Specified VPC can not found.	The specified VPC does not exist.

[See common error codes](#)

7.2 ModifyVSwitchAttribute

Modifies the name and description of a VSwitch.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ModifyVSwitchAttribute	The name of this action. Value: ModifyVSwitchAttribute
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the VSwitch belongs.
VSwitchId	String	Yes	vsw-25naue4gz	The ID of the VSwitch.
Description	String	No	This is my vswitch.	The description of the VSwitch. The description must be 2 to 256 characters in length. It must start with a letter and cannot start with <code>http://</code> or <code>https://</code> .
Ipv6CidrBlock	Integer	No	0	The IPv6 CIDR block of the VSwitch. You can customize the last eight bits of an IPv6 CIDR block. Value range: 0 to 255 By default, the mask of an IPv6 CIDR block is 64-bit long.

Parameter	Type	Required?	Example value	Description
VSwitchName	String	No	VSwitch-1	The name of the VSwitch. The name must be 2 to 128 characters in length. It can contain letters, numbers, periods (.), underscores (_), and hyphens (-). The name must start with a letter and cannot start with <code>http ://</code> or <code>https ://</code>.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	C0FD0EED-F90D-4479-803D-DD623XXXXXX	The ID of the request.

Examples

Request example

```
http ( s )://[ Endpoint ]/? VSwitchId = vsw - 25naue4gz
&< CommonParameters >
```

Response example

• XML format

```
< ModifyVSwitchAttributeResponse >
  < RequestId > 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 </
  RequestId >
</ ModifyVSwitchAttributeResponse >
```

• JSON format

```
{
  "RequestId ":" 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 "
```

```
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidVSwitchId.NotFound	The specified virtual switch does not exist.	The specified VSwitch does not exist.
400	InvalidVSwitchName.Malformed	Specified virtual switch name is not valid.	The format of the name of the specified VSwitch is invalid.
400	InvalidVSwitchDescription.Malformed	Specified virtual switch description is not valid.	The description of the VSwitch is invalid.
404	InvalidVSwitchId.NotFound	The specified virtual switch does not exist.	The specified VSwitch does not exist.

[See common error codes](#)

7.3 DescribeVSwitchAttributes

Queries the configurations of a VSwitch.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeVSwitchAttributes	The name of this action. Value: DescribeVSwitchAttributes
RegionId	String	Yes	cn-hangzhou	The region ID of the VPC to which the route table belongs.
VSwitchId	String	Yes	vsw-25naue4gz	The ID of the VSwitch.

Response parameters

Parameter	Type	Example value	Description
AvailableIpAddressCount	Long	12	The number of available IP addresses.
CidrBlock	String	192.168.0.1/24	The private CIDR block of the VSwitch.
CloudResources	N/A	N/A	Cloud resources under the VSwitch.
└ ResourceCount	Integer	1	The number of cloud resources under the VSwitch.
└ ResourceType	String	nat	The type of the cloud resource.
CreationTime	String	2017-08-22T10:40:25Z	The time when the VSwitch was created.
Description	String	This is my VSwitch.	The description of the VSwitch.
Ipv6CidrBlock	String	2408:4004:0:2900::/64	The IPv6 CIDR block of the VSwitch.
IsDefault	Boolean	false	Whether the VSwitch is the default VSwitch.
RequestId	String	7B48B4B9-1EAD-469F-B488-594DAB4B6A1A	The ID of the request.
ResourceGroupId	String	123456	The ID of the resource group.
RouteTable	N/A	N/A	The route table information of the VSwitch.
└ RouteTableId	String	vtb-bp145q7glnuzdvzu21pom	The ID of the route table associated with the VSwitch.

Parameter	Type	Example value	Description
RouteTableType	String	System	The type of the route table. Valid values: - System: system route table. - Custom: customer route table.
Status	String	Pending	The status of the VSwitch. Valid values: - Pending: being configured - Available: available
VSwitchId	String	vsw-25b7pv15t	The ID of the VSwitch.
VSwitchName	String	test	The name of the VSwitch.
VpcId	String	vpc-257gq642n	The ID of the VPC to which the VSwitch belongs.
ZoneId	String	cn-beijing-a	The ID of the zone to which the VSwitch belongs.

Examples

Request example

```
/? Action = DescribeVSwitchAttributes
& VSwitchId = vsw-25naue4gz
&< CommonParameters >
```

Response example

XML format

```
< DescribeVSwitchAttributesResponse >
  < RouteTable >
    < RouteTableId > vtb-hp3ngu1hkd-utfakqnz76-p </ RouteTableId >
    < RouteTableType > System </ RouteTableType >
  </ RouteTable >
  < Description />
  < IsDefault > false </ IsDefault >
  < AvailableIpAddressCount > 251 </ AvailableIpAddressCount >
  < ResourceGroupId > rg-acfmy45w7w-2cdxa </ ResourceGroupId >
  < ZoneId > cn-huhehaote-a </ ZoneId >
  < VSwitchId > vsw-hp3lyltb1d-osj540yyxj-v </ VSwitchId >
```

```
< VpcId > vpc - hp34hflqqqs_jh3a3q7lbt_r </ VpcId >
< CreationTime > 2019 - 01 - 07T04 : 54 : 14Z </ CreationTime >
< Status > Available </ Status >
< CidrBlock > 192 . 168 . 0 . 0 / 24 </ CidrBlock >
< RequestId > A31F062D - 81F0 - 48BC - 9771 - 915D6622D2_6A </
RequestId >
< VSwitchName > doc1 </ VSwitchName >
< Ipv6CidrBlock > 2408 : 4004 : 0 : 2900 ::/ 64 </ Ipv6CidrBlock >
< CloudResources > />
</ DescribeVSwitchAttributesResponse >
```

JSON format

```
{
  "RouteTable": {
    "RouteTableId": "vtb - hp3ngu1hkd_utfakqnz76_p",
    "RouteTableType": "System"
  },
  "Description": "",
  "IsDefault": false,
  "AvailableIpAddressCount": 251,
  "ResourceGroupId": "rg - acfmy45w7w_2cdxa",
  "ZoneId": "cn - huhehaote - a",
  "VSwitchId": "vsw - hp3lyltb1d_osj540yyxj_v",
  "VpcId": "vpc - hp34hflqqqs_jh3a3q7lbt_r",
  "CreationTime": "2019 - 01 - 07T04 : 54 : 14Z",
  "Status": "Available",
  "CidrBlock": "192 . 168 . 0 . 0 / 24",
  "RequestId": "A31F062D - 81F0 - 48BC - 9771 - 915D6622D2_6A",
  "Ipv6CidrBlock": "2408 : 4004 : 0 : 2900 ::/ 64",
  "VSwitchName": "doc1",
  "CloudResources": {
    "CloudResourceSetType": []
  }
}
```

Error codes

[See common error codes](#)

7.4 CreateVSwitch

Creates a VSwitch in a VPC.

Note the following before you call this action:

- Up to 24 VSwitches can be created in a VPC.
- The first and last three IP addresses of the VSwitch are reserved by the system. For example, if the CIDR block of a VSwitch is 192.168.1.0/24, IP addresses 192.168.1.0, 192.168.1.253, 192.168.1.254, and 192.168.1.255 are reserved.
- The number of cloud product instances under the VSwitch cannot exceed the remaining capacity of the VPC (subtract the current number of cloud product instances from 15,000).

- A cloud product instance can only belong to one VSwitch.
- VSwitches do not support broadcasting or multicasting.

After a VSwitch is created, you cannot modify its CIDR block.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreateVSwitch	The name of this action. Value: CreateVSwitch
CidrBlock	String	Yes	172.16.0.0/24	The CIDR block of VSwitch. The IP address range must meet the following requirements: · The length of the subnet mask for the VSwitch must be in the range of /16 to /29. · The CIDR block of the VSwitch must belong to the CIDR block of the VPC. · The CIDR block of the VSwitch cannot be the same as any destination CIDR block in route entries of the VPC, but can be the subnet of the destination CIDR block. · If the network segment of the switch is the same as the network segment of the same VPC, there can be only one switch for the VPC.
VpcId	String	Yes	vpc-257gq6nxxxxxxx	The ID of the VPC to which the VSwitch belongs.

Parameter	Type	Required?	Example value	Description
ZoneId	String	Yes	cn-hangzhou-b	The ID of the zone to which the switch belongs. To query the region ID, call DescribeZones.
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the VSwitch belongs.
Ipv6CidrBlock	Integer	No	0	The IPv6 CIDR block of the VSwitch. You can customize the last eight bits of an IPv6 CIDR block. Value range: 0 to 255. By default, the length of the IPv6 CIDR mask is /64.
Description	String	No	This is my vswitch.	The description of the VSwitch. The description must be 2 to 256 characters in length and must start with a letter. It cannot start with <code>http://</code> or <code>https://</code>.
VSwitchName	String	No	VSwitch-1	The name of the VSwitch. The name must be 1 to 128 characters in length and must start with a letter. It cannot start with <code>http://</code> or <code>https://</code>.
ClientToken	String	No	dhueeuuxxxd	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.

Parameter	Type	Required?	Example value	Description
OwnerAccount	String	No	N/A	The owner account.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	861E6630-AEC0-4B2D-B214-6CB5E44B7F04	The ID of the request.
VSwitchId	String	vsw-25naue4gz	The ID of the switch.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=CreateVSwitch
&CidrBlock=172.16.0.0/24
&VpcId=vpc-257gq6nxxxx
&ZoneId=cn-hangzhou-b
&<CommonParameters>
```

Response example

- XML format

```
<CreateVSwitchResponse>
  <RequestId>0ED8D006-F706-4D23-88ED-E11ED28DCA C0</RequestId>
  <VSwitchId>vsw-25naue4gz</VSwitchId>
</CreateVSwitchResponse>
```

- JSON format

```
{
  "RequestId": "0ED8D006-F706-4D23-88ED-E11ED28DCA C0",
  "VSwitchId": "vsw-25naue4gz"
```

}

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidZoneId.NotFound	Specified zone does not exist.	The ID of the zone is incorrect.
404	InvalidVpcId.NotFound	Specified VPC does not exist.	The specified VPC does not exist.
400	InvalidVSwitchName.Malformed	Specified virtual switch name is not valid.	The format of the name of the specified VSwitch is invalid.
400	ResourceNotAvailable	Resource you requested is not available in this region or zone.	The resource that you requested is not available in this region or zone.
400	InvalidParameter	Specified CIDR block is not valid in VPC.	The specified CIDR block does not belong to the CIDR block of the VPC.
400	InvalidCidrBlock.Overlapped	Specified CIDR block overlapped with other subnets.	The specified CIDR block overlaps the CIDR block of another VSwitch or the destination CIDR block of an existing customer route. Select a CIDR block that is not used.
400	InvalidCidrBlock.Overlapped	Specified CIDR block overlapped with other entry.	The specified CIDR block overlaps with the CIDR block of another VSwitch, or the destination CIDR block of an existing customer route. Select a CIDR block that is not used.
400	QuotaExceeded.VSwitch	Virtual switch quota exceeded.	The maximum number of VSwitches was exceeded.
400	IncorrectRouteEntryStatus	Some route entry status blocked this operation.	The route table includes entries in the Pending or Modifying status.

HTTP status code	Error code	Error message	Description
400	IncorrectVSwitchStatus	Some virtual switch is modifying within the same VPC.	The VPC has multiple VSwitches that are in the Modifying status. Please try again later.
400	InvalidCidrBlock.MaskLength	Specified CIDR block is not valid .	The form of the CIDR block is invalid.
400	IncorrectVpcStatus	Current VPC status does not support this operation .	The current status of VPC does not support the action.
400	MissingParameter	Miss mandatory parameter.	The required parameters are missing.
400	IncorrectVSwitchStatus	VSwitch Creation simultaneously is not supported.	You cannot create VSwitches because the VPC includes VSwitches in the Creating status.
400	Forbidden.VpcNotFound	Specified VPC can not found.	The specified VPC does not exist.

[See common error codes](#)

7.5 DeleteVSwitch

Deletes a VSwitch.

Note the following before you call this action:

- You first must release or remove all resources under the VPC, including VSwitches, cloud product instances, router interfaces, and HAVIPs.
- Only VSwitches in the available status can be deleted.
- A VSwitch cannot be deleted when the VPC to which it belongs is creating or deleting a VSwitch or route entry.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteVSwitch	The name of this action. Value: DeleteVSwitch
VSwitchId	String	Yes	vsw-asdfjlnaue4g	The ID of the VSwitch to delete.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	AF083E3D-7E29-4B77-A937-1F129802D5XXXXXX	The ID of the request.

Examples

Request example

```
http ( s ):// vpc . aliyuncs . com /? Action = DeleteVSwitch
& VSwitchId = vsw - asdfjlnaue 4g
&< CommonParameters >
```

Response example

• XML format

```
< DeleteVSwitchResponse >
  < RequestId > 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 </
  RequestId >
</ DeleteVSwitchResponse >
```

• JSON format

```
{
  "RequestId ": " 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 "
```

```
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	IncorrectVSwitchStatus	The current virtual switch status does not support this operation.	The specified VSwitch failed to be deleted because it was in the Pending state.
400	DependencyViolation	Some route entry status blocked this operation.	The route table contains entries in the Pending or Modifying status.
400	IncorrectRouteEntryStatus	Some route entry status blocked this operation.	The route table contains entries in the Pending or Modifying state.
400	DependencyViolation.HaVip	VSwitch cannot be deleted when there are some HaVip dependent with it.	You cannot delete this VSwitch because a HAVIP is bound to it.
400	MissingParameter	Miss mandatory parameter.	The required parameters are missing.
404	InvalidVSwitchId.NotFound	VSwitch not exist.	The specified VSwitch does not exist.
404	IncorrectStatus	Vswitch status not stable.	The VSwitch is currently in the Pending or Modifying status. Please try again later.

[See common error codes](#)

8 Region

8.1 DescribeZones

Queries one or more zones in a region.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeZones	The name of this action. Value: DescribeZones
RegionId	String	Yes	cn-hangzhou	The ID of the region. To query the region ID, call DescribeRegions.

Response parameters

Parameter	Type	Example value	Description
Zones	N/A	N/A	A list of zones.
└LocalName	String	China Hangzhou Zone B	The name of the zone.
└ZoneId	String	cn-hangzhou-b	The ID of the zone.
RequestId	String	6FEA0CF3-D3B9-43E5-A304-D217037876A8	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DescribeZonesResponse>
  <RequestId>6FEA0CF3-D3B9-43E5-A304-D217037876A8</RequestId>
  <Zones>
    <Zone>
      <ZoneId>cn-hangzhou-b</ZoneId>
      <LocalName>China Hangzhou Zone B</LocalName>
    </Zone>
    <Zone>
      <ZoneId>cn-hangzhou-d</ZoneId>
      <LocalName>China Hangzhou Zone D</LocalName>
    </Zone>
    <Zone>
      <ZoneId>cn-hangzhou-e</ZoneId>
      <LocalName>China Hangzhou Zone E</LocalName>
    </Zone>
    <Zone>
      <ZoneId>cn-hangzhou-f</ZoneId>
      <LocalName>China Hangzhou Zone F</LocalName>
    </Zone>
    <Zone>
      <ZoneId>cn-hangzhou-g</ZoneId>
      <LocalName>China Hangzhou Zone G</LocalName>
    </Zone>
    <Zone>
      <ZoneId>cn-hangzhou-h</ZoneId>
      <LocalName>China Hangzhou Zone H</LocalName>
    </Zone>
  </Zones>
</DescribeZonesResponse>
```

JSON format

```
{
  "RequestId": "6FEA0CF3-D3B9-43E5-A304-D217037876A8",
  "Zones": {
    "Zone": [
      {
        "ZoneId": "cn-hangzhou-b",
        "LocalName": "China Hangzhou Zone B"
      },
      {
        "ZoneId": "cn-hangzhou-d",
        "LocalName": "China Hangzhou Zone D"
      },
      {
        "ZoneId": "cn-hangzhou-e",

```

```

    " LocalName ":" China    Hangzhou    Zone    E "
  },
  {
    " ZoneId ":" cn - hangzhou - f ",
    " LocalName ":" China    Hangzhou    Zone    F "
  },
  {
    " ZoneId ":" cn - hangzhou - g ",
    " LocalName ":" China    Hangzhou    Zone    G "
  },
  {
    " ZoneId ":" cn - hangzhou - h ",
    " LocalName ":" China    Hangzhou    Zone    H "
  }
]
}
}

```

Error codes

[See common error codes](#)

8.2 DescribeAccessPoints

Queries one or more physical connection access points in a region.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeAccessPoints	The name of this action. Value: DescribeAccessPoints
RegionId	String	Yes	cn-hangzhou	The region to which the access point belongs. To query the region ID, call DescribeRegions.
Filter . N . Key	String	No	Status	The type of the n-th filter. Value range of N: 1 to 5.

Parameter	Type	Required?	Example value	Description
Filter . N . Value . M	RepeatList	No	recommend	The m-th value of the n-th filter . Value range of M: 1 to 5.
HostOperator	String	No	Telecom	The service provider to which the data center connected to the access point belongs.
Name	String	No	test	The name of the access point.
PageNumber	Integer	No	2	The number of pages to return. Default value: 1 .
PageSize	Integer	No	10	The number of rows per page. Maximum value: 50 . Default value: 10 .

Response parameters

Parameter	Type	Example value	Description
AccessPointSet	N/A	N/A	A list of access points.
[⌞] AccessPointId	String	ap-cn-beijing-ft-A	The ID of the access point.
[⌞] AttachedRegionNo	String	cn-beijing	The region of the access point.
[⌞] Description	String	ap1	The description of the access point.
[⌞] HostOperator	String	CNIX	The service provider of the access point.
[⌞] Location	String	aplocation	The location of the access point.
[⌞] Name	String	Beijing-Fengtai-A	The name of the access point.

Parameter	Type	Example value	Description
<code>└Status</code>	String	recommended	The status of the access point.
<code>└Type</code>	String	VPC	The network type of the access of the physical connection.
TotalCount	Integer	5	The number of queried entries.
PageNumber	Integer	1	The current page number.
PageSize	Integer	10	The number of entries per page.
RequestId	String	3E85D803-C7CF-4BCD-9CFE-6DBA1DFFA027	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

XML format

```
<DescribeAccessPointsResponse>
  <AccessPointSet>
    <AccessPointType>
      <Name>Beijing-Fengtai-A</Name>
      <Status>recommended</Status>
      <Description>cn-beijing-ft-cxp32</Description>
      <Type>VPC</Type>
      <Location/>
      <HostOperator>xxx</HostOperator>
      <AttachedRegionNo>cn-beijing</AttachedRegionNo>
      <AccessPointId>ap-cn-beijing-ft-A</AccessPointId>
    </AccessPointType>
    <AccessPointType>
      <Name>Beijing-Yizhuang-A</Name>
      <Status>recommended</Status>
      <Description>cn-beijing-yz-ne203</Description>
      <Type>VPC</Type>
      <Location/>
      <HostOperator>xxx</HostOperator>
      <AttachedRegionNo>cn-beijing</AttachedRegionNo>
      <AccessPointId>ap-cn-beijing-yz-A</AccessPointId>
    </AccessPointType>
  </AccessPointSet>
  <RequestId>
```

```

    < AccessPoin tType >
    < Name > Beijing - Daxing - B </ Name >
    < Status > recommende d </ Status >
    < Descriptio n > cn - beijing - dx - nu16 </ Descriptio n >
    < Type > VPC </ Type >
    < Location />
    < HostOperat or > China Unicom </ HostOperat or >
    < AttachedRe gionNo > cn - beijing </ AttachedRe gionNo >
    < AccessPoin tId > ap - cn - beijing - dx - B </ AccessPoin
tId >
  </ AccessPoin tType >
  < AccessPoin tType >
    < Name > Beijing - Changping - A </ Name >
    < Status > recommende d </ Status >
    < Descriptio n > ap - cn - beijing - cp - CM12 </ Descriptio n
>
    < Type > VPC </ Type >
    < Location />
    < HostOperat or > China Telecom </ HostOperat or >
    < AttachedRe gionNo > cn - beijing </ AttachedRe gionNo >
    < AccessPoin tId > ap - cn - beijing - cp - A </ AccessPoin
tId >
  </ AccessPoin tType >
  < AccessPoin tType >
    < Name > Beijing - Daxing - A </ Name >
    < Status > recommende d </ Status >
    < Descriptio n > cn - beijing - dx - nu17 - a </ Descriptio n
>
    < Type > VPC </ Type >
    < Location />
    < HostOperat or > GDS </ HostOperat or >
    < AttachedRe gionNo > cn - beijing </ AttachedRe gionNo >
    < AccessPoin tId > ap - cn - beijing - dx - A </ AccessPoin
tId >
  </ AccessPoin tType >
</ AccessPoin tSet >
< PageNumber > 1 </ PageNumber >
< TotalCount > 5 </ TotalCount >
< PageSize > 10 </ PageSize >
< RequestId > 3E85D803 - C7CF - 4BCD - 9CFE - 6DBA1DFFA0 27 </
RequestId >
</ DescribeAc ccessPoints Response >

```

JSON format

```

{
  " PageNumber ": 1 ,
  " AccessPoin tSet ":{
    " AccessPoin tType ":[
      {
        " Name ":" Beijing - Fengtai - A ",
        " Status ":" recommende d ",
        " Descriptio n ":" cn - beijing - ft - cxp32 ",
        " Type ":" VPC ",
        " Location ":"",
        " HostOperat or ":" CNIX ",
        " AttachedRe gionNo ":" cn - beijing ",
        " AccessPoin tId ":" ap - cn - beijing - ft - A "
      },
      {
        " Name ":" Beijing - Yizhuang - A ",
        " Status ":" recommende d ",
        " Descriptio n ":" cn - beijing - yz - ne203 ",

```

```

    " Type ":" VPC ",
    " Location ":"",
    " HostOperat or ":" 21vianet ",
    " AttachedRe gionNo ":" cn - beijing ",
    " AccessPoin tId ":" ap - cn - beijing - yz - A "
  },
  {
    " Name ":" Beijing - Daxing - B ",
    " Status ":" recommende d ",
    " Descriptio n ":" cn - beijing - dx - nu16 ",
    " Type ":" VPC ",
    " Location ":"",
    " HostOperat or ":" China Unicom ",
    " AttachedRe gionNo ":" cn - beijing ",
    " AccessPoin tId ":" ap - cn - beijing - dx - B "
  },
  {
    " Name ":" Beijing - Changping - A ",
    " Status ":" recommende d ",
    " Descriptio n ":" ap - cn - beijing - cp - CM12 ",
    " Type ":" VPC ",
    " Location ":"",
    " HostOperat or ":" China Telecom ",
    " AttachedRe gionNo ":" cn - beijing ",
    " AccessPoin tId ":" ap - cn - beijing - cp - A "
  },
  {
    " Name ":" Beijing - Daxing - A ",
    " Status ":" recommende d ",
    " Descriptio n ":" cn - beijing - dx - nu17 - a ",
    " Type ":" VPC ",
    " Location ":"",
    " HostOperat or ":" GDS ",
    " AttachedRe gionNo ":" cn - beijing ",
    " AccessPoin tId ":" ap - cn - beijing - dx - A "
  }
]
},
" TotalCount ": 5 ,
" PageSize ": 10 ,
" RequestId ":" 3E85D803 - C7CF - 4BCD - 9CFE - 6DBA1DFFA0 27 "
}

```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId. NotSupport	The RegionId provided does not support in our records.	The specified region ID is invalid.

[See common error codes](#)

8.3 DescribeRegions

Queries one or more regions.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeRegions	The name of this action. Value : DescribeRegions
AcceptLanguage	String	No	zh-CN	The language of the return value. Valid values: - zh - CN (default) : Chinese - en - US : English
ProductType	String	No	vpc	The product type.

Response parameters

Parameter	Type	Example value	Description
Regions			A list of regions.
└ LocalName	String	China Qingdao	The name of the region.
└ RegionEndpoint	String	vpc.aliyuncs.com	The endpoint of the service in this region.
└ RegionId	String	cn-qingdao	The ID of the region.
RequestId	String	611CB80C-B6A9-43DB-9E38-0B0AC3D9B58F	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?<CommonParameters>
```

Response example

XML format

```
<? xml version="1.0" encoding="UTF-8" ? >
< DescribeRegionsResponse >
  < RequestId > 611CB80C - B6A9 - 43DB - 9E38 - 0B0AC3D9B5 8F </
    RequestId >
  < Regions >
    < Region >
      < RegionId > cn - qingdao </ RegionId >
      < RegionEndpoint > vpc . aliyuncs . com </ RegionEndpoint >
      < LocalName > China North 1 </ LocalName >
    </ Region >
    < Region >
      < RegionId > eu - central - 1 </ RegionId >
      < RegionEndpoint > vpc . eu - central - 1 . aliyuncs . com </
        RegionEndpoint >
      < LocalName > Germany ( Frankfurt ) </ LocalName >
    </ Region >
  < /Regions >
< / DescribeRegionsResponse >
```

JSON format

```
{
  "RequestId": "2F026E79 - 30AD - 47B6 - 9E7D - D1D4BA77F1 F1",
  "Regions": {
    "Region": [
      {
        "RegionId": "cn - qingdao",
        "RegionEndpoint": "vpc . aliyuncs . com",
        "LocalName": "China North 1"
      },
      {
        "RegionId": "eu - central - 1",
        "RegionEndpoint": "vpc . eu - central - 1 . aliyuncs . com",
        "LocalName": "Germany ( Frankfurt )"
      }
    ]
  }
}
```

Error codes

[See common error codes](#)

9 VRouter

9.1 DescribeVRouters

Queries VRouters in a region.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeVRouters	The name of this action. Value: DescribeVRouters
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the VPC belongs. To query the region ID, call DescribeRegions.
VRouterId	String	No	vrt-bp1lhl0taikrteen80ox	The ID of the VRouter.
PageNumber	Integer	No	10	The number of pages to return. Default value: 1.
PageSize	Integer	No	10	The number of rows per page. Maximum value: 50. Default value: 10.

Response parameters

Parameter	Type	Example value	Description
VRouter	N/A		A list of VRouters.
CreationTime	String	2018-03-22T07:46:20Z	The time when the VRouter was created.
Description	String	This is my VRouter.	The description of the VRouter.
RegionId	String	us-west-1	The region where the VPC belongs.
RouteTableIds	N/A	{ "RouteTableId": ["vtb-rj9ybe3y0u41mmjspmop0"] }	The ID of the route table of the VRouter.
VRouterId	String	vrt-rj98khsezfqpjrxmvl7cy	The ID of the VRouter.
VRouterName	String	doctest	The name of the VRouter.
VpcId	String	vpc-rj905wotv6y030t1zz5vl	The ID of the VPC to which the VRouter belongs.
TotalCount	Integer	1	The number of queried entries.
PageNumber	Integer	1	The current page number.
PageSize	Integer	2	The number of entries per page.
RequestId	String	0ED8D006-F706-4D23-88ED-E11ED28DCAC0	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?RegionId=cn-hangzhou
```

&< CommonParameters >

Response example

• XML format

```
< DescribeVRoutersResponse >
  < PageNumber > 1 </ PageNumber >
  < TotalCount > 2 </ TotalCount >
  < VRouters >
    < VRouter >
      < VRouterName > />
      < RouteTableIds >
        < RouteTableId > vtb-bp1krxxzp0c29fmontba1 </
RouteTableId >
      </ RouteTableIds >
      < CreationTime > 2018-12-06T06:11:55Z </ CreationTime >
      < Description > />
      < RegionId > cn-hangzhou </ RegionId >
      < VRouterId > vrt-bp1jcg5cmxjbl9xgc58bw </ VRouterId >
      < VpcId > vpc-bp1qpo0kug3a20qqe9h7v </ VpcId >
    </ VRouter >
    < VRouter >
      < VRouterName > />
      < RouteTableIds >
        < RouteTableId > vtb-bp1blq1oh0ybfnpmlbh20 </
RouteTableId >
      </ RouteTableIds >
      < CreationTime > 2018-11-08T08:54:03Z </ CreationTime >
      < Description > />
      < RegionId > cn-hangzhou </ RegionId >
      < VRouterId > vrt-bp149ve7yeyvio4ncklxz </ VRouterId >
      < VpcId > vpc-bp1aevy8sofi8mhlqc5cm </ VpcId >
    </ VRouter >
  </ VRouters >
  < PageSize > 10 </ PageSize >
  < RequestId > EE4C2417-9437-4333-BDEB-8493F7AA7258 </
RequestId >
</ DescribeVRoutersResponse >
```

• JSON format

```
{
  "PageNumber": 1,
  "TotalCount": 1,
  "VRouters": {
    "VRouter": [
      {
        "CreationTime": "2018-03-22T07:46:20Z",
        "RouteTableIds": {
          "RouteTableId": [
            "vtb-rj9ybe3y0u41mmjspmop0"
          ]
        },
        "VRouterName": "",
        "Description": "",
        "RegionId": "us-west-1",
        "VpcId": "vpc-rj905wotv6y030t1zz5v1",
        "VRouterId": "vrt-rj98khsezfqpjrxmvl7cy"
      }
    ]
  }
}
```

```

    ],
    " PageSize ": 10 ,
    " RequestId ":" CB2793A8 - 845F - 444C - 8E93 - 76F1BBDF9C 78 "
  }

```

Error codes

[See common error codes](#)

9.2 ModifyVRouterAttribute

Modifies the name and description of a VRouter.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ModifyVRouterAttribute	The name of this action. Value: ModifyVRouterAttribute
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the VPC belongs.
VRouterId	String	Yes	vrt-bp1lhl0taikrteen80ox	The ID of the VRouter.
Description	String	No	My VRouter	The description of the VRouter. The description must be 2 to 256 characters in length. It must start with a letter and cannot start with <code>http</code> :// or <code>https</code> ://.

Parameter	Type	Required?	Example value	Description
VRouterName	String	No	VRouter-1	The name of the VRouter. The name must be 2 to 128 characters in length. It can contain letters, numbers, periods (.), underscores (_), and hyphens (-). It must start with a letter and cannot start with <code>http://</code> or <code>https://</code>.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	0ED8D006-F706-4D23-88ED-E11ED28DCA C0	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=ModifyVRouterAttribute
&VRouterId=vrt-bp1lhl0tai krteen80ox x
&<CommonParameters>
```

Response example

- XML format

```
<ModifyVRouterAttributeResponse>
  <RequestId>0ED8D006-F706-4D23-88ED-E11ED28DCA C0</RequestId>
</ModifyVRouterAttributeResponse>
```

- JSON format

```
{
  "RequestId": "0ED8D006-F706-4D23-88ED-E11ED28DCA C0",
  "RouteTableId": "vtb-bp145q7gln uzdvzu21po m",
  "VpcId": "vpc-bp15zckdt3 7pq72zvw30 k",
  "VRouterId": "vrt-bp1lhl0tai krteen80ox x"
```

```
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidVRouterId.NotFound	Specified virtual router does not exist.	The specified VRouter does not exist.
400	InvalidVRouterName.Malformed	Specified virtual router name is not valid.	The VRouter name is invalid.
400	InvalidVRouterDescription.Malformed	Specified virtual router description is not valid.	The VRouter description is invalid.
400	MissingParameter	Miss mandatory parameter.	Required parameters are missing.

[See common error codes](#)

10 Route table

10.1 ModifyRouteTableAttributes

Modifies the name and description of a route table.

Debug

By using [OpenAPI Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ModifyRouteTableAttributes	The name of this action. Value: <code>ModifyRouteTableAttributes</code>
RegionId	String	Yes	cn-hangzhou	The region ID of the VPC to which the route table belongs. To query the region ID, call <code>DescribeRegions</code> .
RouteTableId	String	Yes	vtb-bp145q7glnuzdvzu21pom	The ID of the route table.
Description	String	No	This is my route table.	The description of the route table. The description must be 2 to 256 characters in length. It must start with a letter, but cannot start with <code>http</code> :// or <code>https</code> ://.

Parameter	Type	Required?	Example value	Description
RouteTableName	String	No	doctest	The name of the route table. The name must be 2 to 128 characters in length. It can contain letters, numbers, periods (.), underlines (_), and hyphens (-). It must start with an English letter. The name cannot start with <code>http ://</code> or <code>https ://</code>.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	62172DD5-6BAC-45DF-8D44-xxxxxxx	The ID of the request.

Examples

Request example

```
http ( s ) : // vpc . aliyuncs . com / ? Action = ModifyRouteTableAttribute
& RegionId = cn - hangzhou
& RouteTableId = vtb - bp145q7gln - uzdvzu21po - m
& < CommonParameters >
```

Response example

• XML format

```
< ModifyRouteTableAttributeResponse >
  < RequestId > 62172DD5 - 6BAC - 45DF - 8D44 - xxxxxxx </ RequestId >
</ ModifyRouteTableAttributeResponse >
```

• JSON format

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

```
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate this resource.

[See common error codes](#)

10.2 DescribeRouteTableList

Queries a route table.

Debug

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

Request parameters

Parameter	Type	Required ?	Example value	Description
Action	String	Yes	DescribeRouteTableList	The name of this action. Value: DescribeRouteTableList.
RegionId	String	Yes	cn-hangzhou	The region ID of the VPC to which the route table belongs. To query the region ID, call DescribeRegions .
PageNumber	Integer	No	1	The number of pages to return . Default value: 1.
PageSize	Integer	No	12	The number of rows per page . Maximum value: 50. Default value: 10.

Parameter	Type	Required ?	Example value	Description
ResourceGroupId	String	No	rg-acfmxazb4ph6aiy	The ID of the resource group.
RouteTableId	String	No	vtb-bp145q7glnuzdvzu21pom	The ID of the route table.
RouteTableName	String	No	doctest	The name of the route table.
RouterId	String	No	vrt-bp1lhl0tai krteen80oxx	The ID of the VRouter or VBR to which the route table belongs.
RouterType	String	No	VBR	The type of the router to which the route table belongs. Valid values: - VRouter (default): VRouter - VBR: VBR
VpcId	String	No	vpc-bp15zckdt37pq72zvw3	The ID of the VRouter to which the route table belongs. The value of the RouterType parameter is set to VRouter automatically when this parameter is specified.

Response parameters

Parameter	Type	Example value	Description
PageNumber	Integer	12	The current page number.
PageSize	Integer	1	The number of rows per page.
RequestId	String	DC668356-BCB4-42FD-9BC3-FA2B2E04B634	The ID of the request.

Parameter	Type	Example value	Description
RouterTableList			A list of route tables.
└ CreationTime	String	2017-08-22T10:40:25Z	The time at which the route table was created. The format is YYYY-MM-DDThh:mmZ.
└ Description	String	This is Route Table.	The description of the route table.
└ ResourceGroupId	String	rg-acfmxazb4ph6aiy	The ID of the resource group.
└ RouteTableId	String	vtb-bp145q7glnuzdvzu21pom	The ID of the route table.
└ RouteTableName	String	doctest	The name of the route table.
└ RouteTableType	String	System	The type of route table. Valid values : - Custom: custom route table - System: system route table
└ RouterId	String	vrt-bp1lhl0taikrteen80oxx	The ID of the router to which the route table belongs.
└ RouterType	String	VBR	The type of the router to which the route table belongs. Valid values: - VRouter: VRouter - VBR: VBR
└ Tags			A list of route table tags.
└ VSwitchIds		vsw-bp12mw1f8k3jgygk9bmlj	A list of VSwitches under the VPC.

Parameter	Type	Example value	Description
<code>VpcId</code>	String	vpc-bp15zckdt37pq72zvw3	The ID of the VRouter to which the route table belongs. The value of the RouterType parameter is set to VRouter automatically when this parameter is specified.
TotalCount	Integer	12	The number of queried entries.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DescribeRouteTableList
&RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

XML format

```
<DescribeRouteTableListResponse>
  <Code>200</Code>
  <Message>successful</Message>
  <PageNumber>1</PageNumber>
  <PageSize>10</PageSize>
  <RequestId>87261511-FEB9-4BEC-85BF-70XXXXXXXXXX</
  RequestId>
  <RouterTableList>
    <RouterTableListItem>
      <CreationTime>2018-08-03T08:14:54Z</CreationTime>
      <Description>ddd</Description>
      <RouteTableId>vtb-m5evbtbptn-x2bXXXXXXXXXX</
      RouteTableId>
      <RouteTableName>aaa1111</RouteTableName>
      <RouteTableType>Custom</RouteTableType>
      <RouterId>vrt-m5egeuhgj5-2xgXXXXXXXXXX</RouterId>
      <RouterType>VRouter</RouterType>
      <VSwitchIds>
        <VSwitchId>vsw-m5e3r57pxk-gijXXXXXXXXXX</VSwitchId>
      </VSwitchIds>
      <VpcId>vpc-m5epe3ag3q-XXXXXXXXXX</VpcId>
    </RouterTableListItem>
  </RouterTableList>
```

```
</ DescribeRouteTableListResponse >
```

JSON format

```
{
  "PageNumber": 1,
  "TotalCount": 1,
  "RouterTableList": {
    "RouterTableListType": [
      {
        "CreationTime": "2018-08-03T08:14:54Z",
        "RouterType": "VRouter",
        "Description": "ddd",
        "VSwitchIds": {
          "VSwitchId": [
            "vsw-m5e3r57pxk-gijXXXXXXXX-xx"
          ]
        },
        "RouterId": "vrt-m5egehghj5-2xgXXXXXXXX-xx",
        "RouteTableId": "vtb-m5evbtbptn-x2bXXXXXXXX-xx",
        "RouteTableName": "aaa1111",
        "VpcId": "vpc-m5epe3ag3q-XXXXXXXXXX",
        "RouteTableType": "Custom"
      }
    ]
  },
  "message": "successful",
  "PageSize": 10,
  "RequestId": "87261511-FEB9-4BEC-85BF-70XXXXXXXXXX",
  "Success": true,
  "Code": "200"
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource. Please apply for the permission and try again later.

[See common error codes](#)

10.3 DescribeRouteTables

Queries route entries in a route table.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeRouteTables	The name of this action. Value: DescribeRouteTables
RegionId	String	Yes	cn-hangzhou	The region ID of the VPC to which the route table to be queried belongs.
PageNumber	Integer	No	10	The number of pages to return. Default value: 1 .
PageSize	Integer	No	10	The number of rows per page. Maximum value: 50 . Default value: 10 .
ResourceGroupId	String	No	rg-acfmxazb4ph6aiy	The ID of the resource group.
RouteTableId	String	No	rtb-bp12mw1f8k3jgygk9bmwe	The ID of the route table.
RouteTableName	String	No	RouteTable-1	The name of the route table.
RouterId	String	No	vtb-bp1krxxzp0c29fmontba1	The ID of the VRouter or VBR to which the route table to be queried belongs.

Parameter	Type	Required?	Example value	Description
RouterType	String	No	VRouter	The type of the router to which the route table to be queried belongs. Valid value: - VRouter : VRouter - VBR : VBR
Type	String	No	custom	The type of the route table.
VRouterId	String	No	vtb-bp1krxxzp0c29fmontba1	The ID of the VRouter to which the route table to be queried belongs. The value of the RouterType parameter is set to VRouter automatically when this parameter is specified.

Response parameters

Parameter	Type	Example value	Description
RouteTables	N/A	N/A	A list of route tables.
RouteTableId	String	vtb-bp145q7glnuzdvzu21pom	The ID of the route table to which the route entry belongs.
CreationTime	String	2017-08-22T10:40:25Z	The time when the route table was created.
ResourceGroupId	String	rg-acfmxazb4ph6aiy	The ID of the resource group.
RouteEntries	N/A	N/A	A list of route entries.
RouteTableId	String	vtb-bp145q7glnuzdvzu21pom	The ID of the route table to which the route entry belongs.

Parameter	Type	Example value	Description
DestinationCidrBlock	String	192.168.0.1/24	The destination CIDR block of the route entry.
Type	String	System	The type of the route entry. Valid values: - System: system route - Custom: custom route - BGP: BGP route
NextHopType	String	HaVip	The type of the next hop. Valid values: - Instance: ECS instance (default) - HaVip: HaVip - RouterInterface: router interface
Status	String	Pending	The status of the route entry. Valid values: - Pending: being configured - Available: available - Modifying: being modified
InstanceId	String	ri-2zeo3xzyf38r4urzdvpvfs	The instance ID of the next hop.
NextHops	N/A	N/A	A list of next hops of ECMP routes.
NextHopType	String	HaVip	The type of the next hop. Valid values: - Instance: ECS instance (default) - HaVip: HaVip - RouterInterface: router interface
NextHopId	String	ri-2zeo3xzyf38r4urzdvpvqw	The instance ID of the next hop.
Enabled	Integer	0	Whether to enable the next hop. 0: disabled 1: enabled

Parameter	Type	Example value	Description
<code>Weight</code>	Integer	80	The routing weight of the next hop.
<code>RouteTableType</code>	String	System	The type of the route table to be queried.
<code>VRouterId</code>	String	vrt-bp1lhl0tai krteen80oxx	The ID of the VRouter.
<code>VSwitchIds</code>	N/A	vsw-bp14cagpfy sr29feg5t97	A list of VSwitches under the VPC.
<code>TotalCount</code>	Integer	12	The number of queried entries.
<code>PageNumber</code>	Integer	1	The current page number.
<code>PageSize</code>	Integer	1	The number of entries per page.
<code>RequestId</code>	String	DC668356-BCB4- -42FD-9BC3- FA2B2E04B634	The ID of the request.

Examples

Request example

```
http ( s ) : // vpc . aliyuncs . com / ? Action = DescribeRouteTables
& < CommonParameters >
```

Response example

• XML format

```
< DescribeRouteTablesResponse >
  < PageNumber > 1 </ PageNumber >
  < TotalCount > 1 </ TotalCount >
  < PageSize > 10 </ PageSize >
  < RequestId > DC668356 - BCB4 - 42FD - 9BC3 - FA2B2E04B6 34 </
RequestId >
  < RouteTableList >
    < RouteTable >
      < CreationTime > 2017 - 08 - 22T10 : 40 : 25Z </ CreationTime >
      < RouteEntryList >
        < RouteEntry >
          < NextHops >
            < NextHop >
              < Status > Available </ Status >
              < Type > Custom </ Type >
              < InstanceId > ri - 2zeo3xzyf3 8r4urzdvpvf s </
InstanceId >
```

```

        < NextHopType e > RouterInterface </ NextHopType e >
        < RouteTable Id > vtb - 2zevpmy9th 8cxmwтарqg 4 </
RouteTable Id >
        < Destination nCidrBlock > 10 . 10 . 0 . 0 / 24 </
Destination nCidrBlock >
        </ RouteEntry >
        < RouteEntry >
        < NextHops />
        < Status > Available </ Status >
        < Type > System </ Type >
        < InstanceId />
        < NextHopType e > service </ NextHopType e >
        < RouteTable Id > vtb - 2zevpmy9th 8cxmwтарqg 4 </
RouteTable Id >
        < Destination nCidrBlock > 100 . 64 . 0 . 0 / 10 </
Destination nCidrBlock >
        </ RouteEntry >
        </ RouteEntry s >
        < RouteTable Id > vtb - 2zevpmy9th 8cxmwтарqg 4 </
RouteTable Id >
        < RouteTable Type > System </ RouteTable Type >
        < VRouterId > vrt - 2zefso23vm u6xi3jeiw0 z </ VRouterId >
        </ RouteTable >
        </ RouteTable s >
    </ DescribeRouteTablesResponse >

```

• JSON format

```

{
  "PageNumber": 1,
  "TotalCount": 1,
  "PageSize": 10,
  "RequestId": "DC668356 - BCB4 - 42FD - 9BC3 - FA2B2E04B6 34",
  "RouteTable": {
    "RouteTable": [
      {
        "CreationTime": "2017 - 08 - 22T10 : 40 : 25Z",
        "RouteEntry": {
          "RouteEntry": [
            {
              "Status": "Available",
              "NextHops": {
                "NextHop": []
              },
              "Type": "Custom",
              "InstanceId": "ri - 2zeo3xzyf3 8r4urzdvpvf s",
              "RouteTableId": "vtb - 2zevpmy9th 8cxmwтарqg 4",
              "NextHopType": "RouterInterface",
              "Destination nCidrBlock": "10 . 10 . 0 . 0 / 24"
            },
            {
              "Status": "Available",
              "NextHops": {
                "NextHop": []
              },
              "Type": "System",
              "InstanceId": "",
              "RouteTableId": "vtb - 2zevpmy9th 8cxmwтарqg 4",
              "NextHopType": "service",
              "Destination nCidrBlock": "100 . 64 . 0 . 0 / 10"
            }
          ]
        }
      }
    ]
  },
}

```

```

    " RouteTable Id ":" vtb - 2zevpm9th 8cxmwtaqg 4 ",
    " VRouterId ":" vrt - 2zefso23vm u6xi3jeiw0 z ",
    " RouteTable Type ":" System "
  }
]
}
}

```

Error codes

[See common error codes](#)

10.4 CreateRouteTable

Creates a custom route table.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreateRouteTable	The name of this action. Value: CreateRouteTable
RegionId	String	Yes	cn-hangzhou	The region ID of the VPC to which the route table belongs. To query the region ID, call DescribeRegions.
VpcId	String	Yes	vpc-bp1qpo0ku3a20qqe9h7v	The ID of the VPC to which the custom route table belongs.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.

Parameter	Type	Required?	Example value	Description
Description	String	No	The name of the route table	The description of the route table. The description must be 2 to 256 characters in length. The description must start with a letter, but cannot start with <code>http ://</code> or <code>https ://</code> .
RouteTableName	String	No	myRouteTable	The name of the route table. The name must be 2 to 128 characters in length. It can contain letters, numbers, periods (.), underscores (_), and hyphens (-). It must start with a letter and cannot start with <code>http ://</code> or <code>https ://</code> .

Response parameters

Parameter	Type	Example value	Description
RequestId	String	0ED8D006-F706-4D23-88ED-E11ED28DCA C0	The ID of the request.
RouteTableId	String	vtb-bp145q7glnuzdvzu21pom	The ID of the route table.

Examples

Request example

```
https :// vpc . aliyuncs . com /? Action = CreateRouteTable
& RegionId = cn - hangzhou
& VpcId = vpc - bp1qpo0kug 3a20qqe9h7 v
&< CommonParameters >
```

Response example

- XML format

```
< CreateRoute eTableResp onse >
  < RequestId > 62172DD5 - 6BAC - 45DF - 8D44 - xxxxxxxx </ RequestId
  >
  < RouteTable Id > " vtb - m5evbtbptx xxxxxxxxxx </ RouteTable Id
  >
</ CreateRoute eTableResp onse >
```

- JSON format

```
{
  " RequestId ":" 62172DD5 - 6BAC - 45DF - 8D44 - xxxxxxxx ",
  " RouteTable Id ":" vtb - m5evbtbptx xxxxxxxxxx x "
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter. Description. Malformed	The specified Description is not valid.	The description is invalid.
404	InvalidVpcId. NotFound	Specified VPC does not exist.	The specified VPC does not exist.

[See common error codes](#)

10.5 AssociateRouteTable

Attaches a custom route table to a VSwitch in the same VPC.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	AssociateRouteTable	The name of this action. Value: AssociateRouteTable

Parameter	Type	Required?	Example value	Description
RegionId	String	Yes	cn-hangzhou	The region ID of the VPC to which the route table belongs. To query the region ID, call DescribeRegions.
RouteTableId	String	Yes	vtb-bp145q7glnuzdvzu21pom	The ID of the route table.
VSwitchId	string	Yes	vsw-25naue4gz	The ID of the VSwitch.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115bb	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	DC668356-BCB4-42FD-9BC3-FA2B2E04B634	The ID of the request.

Examples

Request example

```
http ( s ) : // vpc . aliyuncs . com / ? Action = AssociateRouteTable
& RegionId = cn - hangzhou
& RouteTableId = vtb - bp145q7glnuzdvzu21pom
& VSwitchId = vsw - 25naue4gz
&< CommonParameters >
```

Response example

- XML format

```
< AssociateRouteTableResponse >
  < RequestId > 62172DD5 - 6BAC - 45DF - 8D44 - xxxxxxxx </ RequestId
>
</ AssociateRouteTableResponse >
```

- JSON format

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

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRouteTableId.NotFound	Specified route table does not exist.	The specified route table does not exist.

[See common error codes](#)

10.6 UnassociateRouteTable

Detaches a route table from a VSwitch.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	UnassociateRouteTable	The name of this action. Value: UnassociateRouteTable

Parameter	Type	Required?	Example value	Description
RegionId	String	Yes	cn-hangzhou	The region ID of the VPC to which the route table belongs. To query the region ID, call DescribeRegions.
RouteTableId	String	Yes	vtb-bp145q7glnuzdvzu21pom	The ID of the route table.
VSwitchId	String	Yes	vsw-25naue4gz	The ID of the VSwitch.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	62172DD5-6BAC-45DF-8D44-xxxxxxx	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=UnassociateRouteTable
&RegionId=cn-hangzhou
&RouteTableId=vtb-bp145q7glnuzdvzu21pom
&VSwitchId=vsw-25naue4gz
&<CommonParameters>
```

Response example

- XML format

```
< Unassociat eRouteTabl eResponse >  
  < RequestId > 62172DD5 - 6BAC - 45DF - 8D44 - xxxxxxxx </ RequestId  
  >  
</ Unassociat eRouteTabl eResponse >
```

- JSON format

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

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRouteTableId.NotFound	Specified route table does not exist.	The specified route table does not exist.

[See common error codes](#)

10.7 DeleteRouteTable

Deletes a custom route table.

Debug

By using [OpenAPI Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteRouteTable	The name of this action. Value: DeleteRouteTable

Parameter	Type	Required?	Example value	Description
RegionId	String	Yes	cn-hangzhou	The region ID of the VPC to which the VRouter belongs. To query the region ID, call DescribeRegions.
RouteTableId	String	Yes	vtb-bp145q7glnuzdvzu21pom	The ID of the route table.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	DC668356-BCB4-42FD-9BC3-FA2B2E04B634	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DeleteRouteTable
&RegionId=cn-hangzhou
&RouteTableId=vtb-bp145q7glnuzdvzu21pom
&<CommonParameters>
```

Response example

• XML format

```
<DeleteRouteTableResponse>
  <RequestId>62172DD5-6BAC-45DF-8D44-xxxxxxxx</RequestId>
</DeleteRouteTableResponse>
```

• JSON format

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

```
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	IncorrectVSwitchStatus	The current virtual switch status does not support this operation.	The specified VSwitch failed to be deleted because it is in the Pending status.

[See common error codes](#)

10.8 CreateRouteEntry

Creates a custom route entry on a VRouter or VBR.

Note the following before you call this action to add custom route entries for a VRouter:

- Up to 48 custom route entries can be created in a route table.
- The destination CIDR block of each custom route entry cannot be the same as the CIDR block of the VSwitch, and it cannot include or be included by the CIDR block of the VSwitch.
- The destination CIDR block of each custom route entry cannot be 100.64.0.0/10 or be included by 100.64.0.0/10.
- The destination CIDR blocks of route entries in the same route table cannot be the same.
- If the destination CIDR block is an IP address, the mask /32 is used.
- Multiple route entries can point to the same next hop.
- The next hop of each custom route entry and the route table must be in the same VPC.

- ECMP can be configured by using the NextHopList parameter.
 - When adding a normal custom route entry (non-ECMP), you must specify the DestinationCidrBlock, NextHopType and NextHopId parameters, and you cannot specify the NextHopList parameter.
 - When adding an ECMP route entry, you must specify the DestinationCidrBlock and NextHopList parameters, and you cannot specify the NextHopType and NextHopId parameters.

Note the following when you call this action to add route entries for a VBR:

- Up to 48 route entries can be created in a route table.
- The NextHopList parameter is not supported.
- The destination CIDR block of each custom route entry cannot be 100.64.0.0/10 or be included in 100.64.0.0/10.
- The destination CIDR blocks of route entries in the same route table cannot be the same.
- If the destination CIDR block is an IP address, the mask /32 is used.
- Multiple route entries can point to the same next hop (NextHopId).
- The next hop (NextHopId) of each route entry must be a router interface associated with the VBR.
- The route entry can only be added when the VBR is in the Active status and the corresponding physical connection is in the Enabled status and not financially locked.
- Only common route entries (non- ECMP) can be added. You must specify the DestinationCidrBlock, NextHopType, and NextHopId parameters, and you cannot specify the HopList parameter.

Debug

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

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreateRouteEntry	The name of this action. Value: CreateRouteEntry.

Parameter	Type	Required?	Example value	Description
DestinationCidrBlock	String	Yes	192.168.0.1/24	The destination CIDR block of the custom route entry. Both IPv4 and IPv6 destination CIDR blocks are supported. The destination CIDR block must meet the following requirements: • The destination CIDR block cannot be 100.64.0.0/10 or any of its subnets. • Different route entries in a route table cannot use the same destination CIDR block. • If the destination CIDR block is an IP address, the mask / 32 is used by default. • If the destination CIDR block is an IPv6 address, the mask /128 is used.
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the route table belongs.
RouteTableId	String	Yes	Vtb-bp145q7glnuzdxxxxxxxx	The ID of the route table.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-001xxxxxxxx	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.
NextHopId	String	No	ri-2zeo3xzyf38r4xxxxxxxx	The ID of the instance used as the next hop.

Parameter	Type	Required?	Example value	Description
NextHopList.N.NextHopId	String	No	ri-2zeo3xzyf38r4xxxxxxxx	The ID of the instance used as the next hop.
NextHopList.N.NextHopType	String	No	RouterInterface	The type of the next hop. Valid values: RouterInterface: router interface
NextHopList.N.Weight	Integer	No	10	The routing weight of the next hop.
NextHopType	String	No	RouterInterface	The type of the next hop. Valid values: - Instance: ECS instance (default) - HaVip: HaVip - RouterInterface: router interface - NetworkInterface: Elastic Network Interface (ENI) - VpnGateway: VPN Gateway - IPv6Gateway: IPv6 Gateway

Response parameters

Parameter	Type	Example value	Description
RequestId	String	0ED8D006-F706-4D23-88ED-E11ED28DCAC0	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=CreateRouteEntry
&DestinationCidrBlock=192.168.0.1/24
&RouteTableId=vtb-bp145q7glnuzdxxxxxxxxx
```

&< CommonParameters >

Response example

XML format

```
< CreateRouteEntryResponse >
  < RequestId > 12D086F6 - 8F31 - 4658 - 84C1 - 006DED011A 85 </
  RequestId >
</ CreateRouteEntryResponse >
```

JSON format

```
{
  "RequestId ":" 12D086F6 - 8F31 - 4658 - 84C1 - 006DED011A 85 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidInstanceId.NotFound	Specified instance does not exist.	The specified instance does not exist.
400	MissingParameter	Miss mandatory parameter.	The required parameters are missing.
400	InvalidCidrBlock.Malformed	Specified CIDR block is not valid.	The format of the specified CIDR block is invalid.
404	InvalidNextHopId.NotFound	Specified next hop does not exist.	The specified next hop does not exist.
404	InvalidRouteTableId.NotFound	Specified route table does not exist.	The specified VRouter does not exist.
400	InvalidCIDRBlock.Duplicate	Specified CIDR block already exists.	The specified CIDR block already exists in this route table.
400	IncorrectVpcStatus	Current VPC status does not support this operation.	The current VPC status does not support this operation.

HTTP status code	Error code	Error message	Description
400	IncorrectInstanceStatus	Current instance status does not support this operation.	The current instance status does not support this operation.
400	QuotaExceeded	Route entry quota exceeded in this route table.	The route entry quota is exceeded.
400	IncorrectRouteEntryStatus	Some route entry status blocked this operation.	The route table includes entries in the Pending or Modifying status.
400	InvalidCidrBlock	Specified CIDR block is not valid.	The following are possible causes: 1. You cannot use this CIDR block because it is not configured in the whitelist of IP address 10.0.0.0/8. 2. The destination CIDR block of the added route entry cannot belong to any of the CIDR blocks of VSwitches in the same VPC. 3. The CIDR block cannot be 100.64.0.0/10.
400	InvalidNextHopType	Specified parameter "NextHopType" is not valid	The specified next hop type is invalid.
400	InvalidNextHop.NotFound	Specified next hop does not exist.	The specified next hop does not exist.
400	InvalidVRouter.NotFound	vRouter not exists.	The VRouter does not exist.
400	InvalidVpc.NotFound	Vpc not exists.	The specified VPC does not exist. Check whether you have entered the correct VPC.
400	InvalidNextHopTypeAndList.BothNull	both nexthopType and nextHopList are null.	The next hop type and next hop list are empty.

HTTP status code	Error code	Error message	Description
400	InvalidNextHopTypeAndListBothNotNull	both nextHopType and nextHopList are not null.	The next hop type and next hop list cannot be empty at the same time.
400	InvalidRouterInterface	invalid router interface.	The specified router interface does not exist.
400	InvalidOppositeRouterType	nextHop list cannot only contain router interface whose opposite router interface is on vbr.	The type of the peer router of the router interface used as the next hop must be a VBR.
400	InvalidNextHopListSize	nextHop size is illegal. Must be between 2 and 4.	You must specify 2 to 4 router interfaces as the next hops.
400	InvalidEntryRuleQuota.NotFound	Route entry quota rule not exists.	The specified route entry quota rule does not exist.
400	Forbidden.CheckEntryRuleQuota	Route entry quota rule check error.	An error occurred while the route entry quota is being checked.
400	InvalidVBRStatus	invalid virtual border router status.	The status of the VBR is invalid.
400	InvalidPhysicalConnectionBusinessStatus	invalid physical connection business status.	The status of the physical connection is invalid.
404	InvalidHaVipId.NotFound	The specified HaVip does not exist in the specified VPC.	The specified HAVIP does not exist in the specified VPC.
400	IncorrectHaVipStatus	This operation is denied because satus of the specified HaVip is neither Available nor InUse.	This operation is not allowed because the status of the HAVIP is Available or InUse.
400	CountLimitExceed.HaVipRouteEntry	There can be 5 route entry to HaVip at most in one route table.	The number of custom route entries pointing to the specified HaVip instance has reached the limit.

HTTP status code	Error code	Error message	Description
400	InvalidRouteEntry. Duplicate	The route entry already exist.	The specified route entry already exists.
403	IncorrectInstanceStatus	The current status of the resource does not support this operation.	The current resource status does not support this operation.
400	InvalidCidrBlock	Specified CIDR block is already exists.	The specified CIDR block overlaps the CIDR block of another VSwitch or the destination CIDR block of an existing custom route entry. Select a CIDR block that is not used.
400	IncorrectRouteEntryStatus	Specified routeEntry status error.	The route table includes entries in the Pending or Modifying status.
400	IncorrectRouteEntryStatus	The vpc has NotStable routeEntry status.	This operation is not allowed because the route table includes entries in the Pending or Modifying status.
400	IncorrectRouteEntryStatus	VBR has NotStable route entry.	This operation is not allowed because the route table includes entries in the Pending or Modifying status.
400	InvalidParam	The Ecmp routerEntry with router interfaces local vgw vip not match.	The route entry does not match the VIP of the local video gateway of the router interface.
400	INVALID_WEIGHT_PARAM	Specified value of weight invalid	The specified weight is invalid.
400	FORBIDDEN_USE_VPC_AS_INTERNET_GATEWAY	The Specified CIDR must be in vpc CIDR.	The specified CIDR block must be a subset of the VPC CIDR block.

HTTP status code	Error code	Error message	Description
400	INVALID_VPC_ID	The Specified VpcId not match.	The specified VPC does not exist.
400	InvalidRouteEntrySize	The Specified routerEntry size not legal.	To configure ECMP, you must configure 2 to 4 router interfaces as the next hops.
400	InvalidRouteEntry	Specified routeEntry not exist.	The specified route entry does not exist.

[See common error codes](#)

10.9 DeleteRouteEntry

Deletes a router entry from a route table.

Note the following before deleting a route entry:

- You can only delete a route entry that is in the available state.
- You cannot delete a route entry from a VPC that is creating or deleting a VSwitch or route entry.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteRouteEntry	The name of this action. Value: DeleteRouteEntry
DestinationCidrBlock	String	Yes	0.0.0.0/0	The destination CIDR block of the route entry to be deleted. Both IPv4 and IPv6 CIDR blocks are supported.

Parameter	Type	Required?	Example value	Description
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the route table belongs.
RouteTableId	String	Yes	trb-2ze3jgygk9bmsj23sfe12	The ID of the route table to which the route entry to be deleted belongs.
NextHopId	String	No	ri-2zeo3xzyf38r4urzdvpfs	The instance ID of the next hop.
NextHopList.N.NextHopId	String	No	ri-2zeo3xzyf38r43cds23qw	The instance ID of the next hop.
NextHopList.N.NextHopType	String	No	RouterInterface	The type of the next hop. Valid values: - Instance: ECS instance (default) - HaVip: HaVip - RouterInterface: router interface

Response parameters

Parameter	Type	Example value	Description
RequestId	String	0ED8D006-F706-4D23-88ED-E11ED28DCA C0	The ID of the request.

Example

Request example

```
https://vpc.aliyuncs.com/?Action=DeleteRouteEntry
&DestinationCidrBlock=0.0.0.0/0
&RouteTableId=trb-2ze3jgygk9bmsj23sfe12
```

&< CommonParameters >

Response example

• XML format

```
< DeleteRouteEntryResponse >
  < RequestId > 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 </
    RequestId >
</ DeleteRouteEntryResponse >
```

• JSON format

```
{
  "RequestId ":" 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	MissingParameter	Miss mandatory parameter.	The required parameters are missing.
400	IncorrectRouteEntryStatus	Some route entry status blocked this operation.	This operation cannot be performed because one or more route entries is in the pending or modifying state.
404	InvalidRouteTableId.NotFound	Specified route table does not exist.	The specified route table does not exist.
400	OperationDenied	Specified operation is denied as route entry type is system.	This operation cannot be performed because the route entry is the system route entry.
400	InvalidRouteEntry.NotFound	Route entry not exists.	The route entry does not exist.
400	InvalidVRouter.NotFound	vRouter not exists.	The router does not exist.
400	IncorrectRouteEntryStatus	VBR has NotStable route entry.	The VBR route table contains entries in the Pending or Modifying status.

HTTP status code	Error code	Error message	Description
400	IncorrectRouteEntryStatus	Specified routeEntry status error.	The route table contains entries in the Pending or Modifying state.
400	Forbidden	Specified RouteEntry cannot be deleted by openApi.	You cannot delete the route entry by calling an API.
400	InvalidRouteEntry	Specified routeEntry does not exist.	The specified route entry does not exist.
400	IncorrectRouteEntryStatus	Vpc NotStable route entry.	The route table contains entries in the Pending or Modifying state.
400	IncorrectVpcStatus	Current VPC status does not support this operation.	The status of VPC does not support the action.

[See common error codes](#)

11 Router interface

11.1 CreateRouterInterface

Creates a router interface.

Note the following before you call this action:

- Up to one pair of interconnected router interfaces can be created between two VRouter.
- Up to five router interfaces can be created on a VRouter.
- If a delinquent router interface is under your account, you can no longer create router interfaces.
- Route entries in the same route table cannot have the same destination CIDR blocks.
- The VBR must be the connection initiator and must be in the Activated status.



Note:

Router interfaces created by calling this action only support the Pay-As-You-Go billing method.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreateRouterInterface	The name of this action. Value: CreateRouterInterface
OppositeRegionId	String	Yes	cn-shanghai	The region of the connection acceptor.

Parameter	Type	Required?	Example value	Description
RegionId	String	Yes	cn-hangzhou	The region to which the router interface belongs. To query the region ID, call DescribeRegions.
Role	String	Yes	Initiating Side AcceptingSide	The role of the router interface. Valid values: - Initiating Side : Connection initiator. - AcceptingSide : Connection acceptor.
RouterId	String	Yes	cn-hangzhou	The ID of the router associated with the router interface.
RouterType	String	Yes	VRouter	The type of the router associated with the router interface. Valid values: - VRouter : VRouter - VBR : VBR

Parameter	Type	Required?	Example value	Description
Spec	String	Yes	Large	The specification of the router interface. The following are available specifications and the corresponding bandwidths: • Mini . 2 : 2 Mbps • Mini . 5 : 5 Mbps • Small . 1 : 10 Mbps • Small . 2 : 20 Mbps • Small . 5 : 50 Mbps • Middle . 1 : 100 Mbps • Middle . 2 : 200 Mbps • Middle . 5 : 500 Mbps • Large . 1 : 1000 Mbps • Large . 2 : 2000 Mbps • Large . 5 : 5000 Mbps • Xlarge . 1 : 10000 Mbps  Note: The value of Spec is Negative when the role is AcceptingSide.
AccessPointId	String	No	ap-cn-shanghaiSZ-pd-A	The ID of the access point to which the VBR belongs. To query the region ID, call DescribeAccessPoints.  Note: You must specify this parameter in the scenario of physical access.

Parameter	Type	Required?	Example value	Description
AutoPay	String	No	false	Whether the order is paid automatically. Valid values: · false Automatic payment is not enabled. You need to go to the Order center to complete the payment after the order is generated. · true : Automatic payment is enabled and the order is paid automatically.  Note: This parameter is required if the value of InstanceChargeType is PrePaid .
ClientToken	String	No	sjffha123334	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. It must be 1 to 64 ASCII characters in length.
Description	String	No	This is my description.	The description of the router interface. The description must be 2 to 256 characters in length. It must start with a letter but cannot start with <code>http</code> <code>://</code> or <code>https</code> <code>://</code>.

Parameter	Type	Required?	Example value	Description
HealthCheckSourceIp	String	No	116.62.222.28	The source IP address used to perform health check. It must be an unused IP address of the local VPC.  Note: You can specify this parameter in the scenario of physical access.
HealthCheckTargetIp	String	No	116.62.222.28	The destination IP address of health check.  Note: This parameter is required if the HealthCheckSourceIp parameter is specified.
InstanceChargeType	String	No	PrePaid	The billing method of the router interface. Valid values: PostPaid (default): Pay-As-You-Go
Name	String	No	Router interface 1	The name of the router interface. The name must be 2 to 128 characters in length. It can contain letters, numbers, periods (.), underscores (_), and hyphens (-). It must start with a letter but cannot start with <code>http ://</code> or <code>https ://</code>.
OppositeAccessPointId	String	No	ap-cn-shanghaiSZ-pd-A	The ID of the access point of the peer router interface.  Note: This parameter is required when the peer router interface is on a VBR. It cannot be modified after the router interface is created.

Parameter	Type	Required?	Example value	Description
OppositeInterfaceId	String	No	ri-2zeo3xzyf38r4urzdvpfs	The ID of the peer router interface.
OppositeInterfaceOwnerId	String	No	ffsf	The ID of the owner of the peer router interface.
OppositeRouterId	String	No	vrt-bp1lhl0taikrteen80ox	The ID of the peer router.
OppositeRouterType	String	No	VRouter	The type of the router associated with the peer router interface. Valid values: - VRouter : VRouter - VBR : VBR
Period	String	No	3	The validity period of the purchase. Value ranges: - Payments on a monthly basis: 1 to 9. - Payments on a yearly basis: 1 to 3.  Note: When the value of the <code>InstanceChargeType</code> parameter is <code>PrePaid</code>, this parameter is required.

Parameter	Type	Required?	Example value	Description
PricingCycle	String	No	Month	The billing cycle of the Subscription billing method. Valid values: - Month (default): billing on a monthly basis - Year : billing on a yearly basis  Note: This parameter is required if the value of the InstanceChargeType parameter is PrePaid 5.

Response parameters

Parameter	Type	Example value	Description
OrderId	String	202008594930117	The order number. This parameter is returned if you select the Subscription billing method.
RequestId	String	079874CD-AEC1-43E6-AC03-ADD96B6E4907	The ID of the request.
RouterInterfaceId	String	ri-2ze7fbuohmxxxxxx	The ID of the router interface.

Examples

Request example

```

http ( s ):// vpc . aliyuncs . com /? Action = CreateRouterInterface
& OppositeRegionId = cn - shanghai
& RegionId = cn - hangzhou
& Role = Initiating Side | Accepting Side
& RouterId = cn - hangzhou
& RouterType = VRouter
& Spec = Large

```

```
<< CommonParameters >
```

Response example

• XML format

```
< CreateRouterInterfaceResponse >
  < RequestId > 980960B0 - 2969 - 40BF - 8542 - EBB34FD358 AB </
  RequestId >
  < RouterInterfaceId > ri - 2ze7fbuohm xxxxxx </ RouterInterfaceId >
</ CreateRouterInterfaceResponse >
```

• JSON format

```
{
  "RouterInterfaceId": "ri - 2ze7fbuohm xxxxxx ",
  "RequestId": "980960B0 - 2969 - 40BF - 8542 - EBB34FD358 AB "
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The regionId provided does not exist in our records.	The specified region ID does not exist.
400	InvalidRole.ValueNotSupported	The specified Role is not valid.	The specified role is invalid.
400	InvalidSpecification.ValueNotSupported	The specified Spec is not supported.	The specified specification is not supported.
400	InvalidRouterType.ValueNotSupported	The specified RouterType is not valid.	The specified router type is invalid.
404	InvalidRouterId.NotFound	The specified RouterId does not exist in our records.	The specified router ID does not exist.

HTTP status code	Error code	Error message	Description
400	InvalidDescription. Malformed	The specified "Description" is not valid.	The specified description is invalid. The description must be 2 to 256 characters in length. It cannot start with http:// or https://.
400	Forbidden. BillsOutstanding	You cannot create more RouterInterface because you have bills outstanding.	You cannot create router interfaces because you have overdue payments.
400	LimitationExceed. InterfaceNumberOnRouter	Total number of RouterInterfaces on a Router exceeded.	The quota for router interfaces has been reached.
400	Forbidden. NotInRouterInterfaceCreateWhitelist	Not in router interface create whitelist.	It does not exist in the whitelist of the router interface.
400	RI_CREATE_ONE_LIMIT_BY_SYNC	Create ri only one limit by sync.	Only one router interface can be created at a time.
400	InvalidAccessPoint. ValueNotAllowed	The non-vbr router interface cannot have access point configured.	You cannot configure an access point for a router interface not on a VBR.
400	InvalidAccessPoint. ValueNotAllowed	The non-vbr opposite router interface cannot have opposite access point configured.	You cannot configure an access point for a router interface not on a VBR.
400	InvalidAccessPoint. NotMatch	The accessPoint id is not matched	The ID of the access point is invalid.
400	InvalidAccessPoint. NotExist	The accessPoint not exist	The specified access point does not exist.

HTTP status code	Error code	Error message	Description
400	InvalidRouterType. ValueNotSupported	The specified RouterType is not valid	The specified router type is invalid.
400	ForbiddenAction	The user dose not supported this action.	You are not authorized to do this operation.

[See common error codes](#)

11.2 DescribeRouterInterfaces

Queries one or more router interfaces in a region.

You can filter the results using the following filters. The relationship between the values of a filter is “or” . A router interface is returned so long as one filter is met. The relationship between filters is “and” . A router interface is returned only all the filters are met.

- RouterInterfaceId: The ID of the router interface.
- RouterId: The ID of the router.
- RouterType: The type of the router. Valid values: VRouter| VBR.
- RouterInterfaceOwnerId: The ID of the account to which the router interface belongs.
- OppositeInterfaceId: The ID of the peer router interface.
- OppositeRouterType: The type of the peer router interface. Valid values:VRouter | VBR.
- OppositeRouterId: The ID of the peer router interface.
- OppositeInterfaceOwnerId: The ID of the account to which the peer router interface belongs.
- Status: The status of the router interface.
- Name : The name of the router interface.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeRouterInterfaces	The value of this action. Value: DescribeRouterInterfaces
RegionId	String	Yes	cn-hangzhou	The ID of the region to which one or more router interfaces belongs. To query the region ID, call DescribeRegions.
Filter.n.Key	String	No	Filter.1.status	Filter keys. Up to five filters are supported. Value range of n : 1 to 5.
Filter.n.Value.m	String	No	Filter.1.Active	The corresponding value of the specified filter key. Value range of m : 1 to 5.
IncludeReservationData	Boolean	No	false	Indicates whether renewal data is included.
PageNumber	Integer	No	0	The number of pages to return. Default value: 1.
PageSize	Integer	No	10	The number of entries per page. Maximum value: 50. Default value: 10.

Response parameters

Parameter	Type	Example value	Description
TotalCount	Integer	10	The number of queried entries.
PageNumber	Integer	10	The current page number.

Parameter	Type	Example value	Description
PageSize	Integer	10	The number of entries per page.
RequestId	String	C7F6FCBD-F9CC-4501-8EF3-CDC9577CAE45	The ID of the request.
RouterInterfaceSet	N/A	N/A	A list of router interfaces.
[⌞] AccessPointId	String	ap-cn-shanghaiSZ-pd-A	The ID of the access point.
[⌞] Bandwidth	Integer	10	The bandwidth of the router interface.
[⌞] BusinessStatus	String	Normal	The business status of the router interface. - Normal: normal - FinancialLocked: locked because the router interface is overdue - SecurityLocked: locked for security protection
[⌞] ChargeType	String	PayByTraffic	The payment method.
[⌞] ConnectedTime	String	2017-06-08T12:20:55	The time at which the connection was established.
[⌞] CreationTime	String	2017-06-08T12:20:55	The time at which the route table was created.
[⌞] CrossBorder	Boolean	false	Indicates whether the connection is a cross-border connection.
[⌞] Description	String	This is my router interface.	The description of the router interface.
[⌞] EndTime	String	2017-06-08T12:20:55	The end time of data obtaining.

Parameter	Type	Example value	Description
<code>HasReservationData</code>	String	false	Whether renewal data is obtained.
<code>HealthCheckSourceIp</code>	String	116.62.222.28	The source IP of health check.
<code>HealthCheckTargetIp</code>	String	116.62.222.28	The target IP of health check.
<code>Name</code>	String	test	The name of the router interface.
<code>OppositeAccessPointId</code>	String	ap-cn-shanghaiSZ-pd-A	The ID of the peer access point.
<code>OppositeBandwidth</code>	Integer	12	The bandwidth of the peer router interface.
<code>OppositeInterfaceBusinessStatus</code>	String	Normal	The business status of the peer router interface.
<code>OppositeInterfaceId</code>	String	ri-bp1itx13bwe6f2wfh3qpj	The ID of the peer router interface.
<code>OppositeInterfaceOwnerId</code>	String	1231579085529123	The ID of account to which the peer router interface belongs.
<code>OppositeInterfaceSpec</code>	String	Large	The specification of the peer router interface.
<code>OppositeInterfaceStatus</code>	String	Normal	The status of the peer router interface.
<code>OppositeRegionId</code>	String	cn-shanghai	The region where the peer router interface is located.
<code>OppositeRouterId</code>	String	vrt-bp1d3bxtdv68tfd7gfjkd	The ID of the router to which the peer router interface belongs.

Parameter	Type	Example value	Description
<code>└OppositeRouterType</code>	String	VRouter	The type of the router to which the peer router interface belongs.
<code>└OppositeVpcInstanceId</code>	String	vpc-bp1qpo0kug3a20qqe9h7v	The ID of the VPC to which the peer router interface belongs.
<code>└ReservationActiveTime</code>	String	2019-03-11T16:00:00Z	The time at which the renewal takes effect.
<code>└ReservationBandwidth</code>	String	10	The bandwidth for the renewal.
<code>└ReservationInternetChargeType</code>	String	PayByBandwidth	The payment type for the renewal.
<code>└ReservationOrderType</code>	String	RENEWCHANGE	The order type for the renewal.
<code>└Role</code>	String	InitiatingSide	The role in a peering connection.
<code>└RouterId</code>	String	vrt-bp1d3bxtdv68tfd7gfjkd	The ID of the router to which the route entry belongs.
<code>└RouterInterfaceId</code>	String	ri-2zenfgfpyu3v93koa4sfo	The ID of the router interface.
<code>└RouterType</code>	String	VRouter	The type of the router to which the route table belongs. Valid values: - VRouter: VRouter - VBR: VBR
<code>└Spec</code>	String	Large	The specification of the router interface.
<code>└Status</code>	String	active	The status of the router interface.
<code>└VpcInstanceId</code>	String	vpc-2ze3tq4uxhytg717x7o4d	The ID of the local VPC in the peering connection.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DescribeRouterInterfaces
&RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

• XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DescribeRouterInterfacesResponse>
  <PageNumber>1</PageNumber>
  <TotalCount>2</TotalCount>
  <PageSize>10</PageSize>
  <RequestId>01818199-04F6-47F4-9ADF-7CC824CF57A4</RequestId>
  <RouterInterfaceSet>
    <RouterInterface>
      <ChargeType>Prepaid</ChargeType>
      <HasReservationData>>false</HasReservationData>
      <OppositeInterfaceBusinessStatus>Normal</OppositeInterfaceBusinessStatus>
      <RouterInterfaceId>ri-2zenfgfpyu3v93koa4sf0</RouterInterfaceId>
      <OppositeInterfaceStatus>Deleted</OppositeInterfaceStatus>
      <Spec>Small.5</Spec>
      <OppositeInterfaceOwnerId>1231579085529123</OppositeInterfaceOwnerId>
      <CrossBorder>>false</CrossBorder>
      <OppositeInterfaceSpec>Negative</OppositeInterfaceSpec>
      <CreationTime>2017-12-27T06:34:30Z</CreationTime>
      <RouterType>VRouter</RouterType>
      <Status>Inactive</Status>
      <OppositeRouterType>VRouter</OppositeRouterType>
      <OppositeRouterId>vrt-bp1el837xk-kakub7ci0tj</OppositeRouterId>
      <OppositeInterfaceId>ri-bp1itx13bw-e6f2wfh3qpj</OppositeInterfaceId>
      <VpcInstanceId>vpc-2ze3tq4uxh-ysg717x7o4d</VpcInstanceId>
      <RouterId>vrt-2zeazning6tbzkm5c0jj2</RouterId>
      <ConnectedTime>2017-12-27T06:34:37Z</ConnectedTime>
      <OppositeRegionId>cn-hangzhou</OppositeRegionId>
      <BusinessStatus>Normal</BusinessStatus>
      <Role>InitiatingSide</Role>
      <OppositeVpcInstanceId>vpc-bp1iq3579f26c3gpkj92e</OppositeVpcInstanceId>
      <EndTime>2018-01-27T16:00:00Z</EndTime>
    </RouterInterface>
    <RouterInterface>
      <ChargeType>Prepaid</ChargeType>
      <HasReservationData>>false</HasReservationData>
```

```

    < OppositeIn terfaceBus inessStatu s > Normal </ OppositeIn
    terfaceBus inessStatu s >
    < RouterInte rfaceId > ri - 2zegbp7nhj 0mnwm6irnu o </
    RouterInte rfaceId >
    < OppositeIn terfaceSta tus > Deleted </ OppositeIn
    terfaceSta tus >
    < Spec > Small . 1 </ Spec >
    < OppositeIn terfaceOwn erId > 1231579085 529123 </
    OppositeIn terfaceOwn erId >
    < CrossBorde r > false </ CrossBorde r >
    < OppositeIn terfaceSpe c > Negative </ OppositeIn terfaceSpe
    c >
    < CreationTi me > 2017 - 12 - 27T06 : 31 : 30Z </ CreationTi me
    >
    < RouterType > VRouter </ RouterType >
    < Status > Inactive </ Status >
    < OppositeRo uterType > VRouter </ OppositeRo uterType >
    < OppositeRo uterId > vrt - bp1d3bxtdv 68tfd7gfjk d </
    OppositeRo uterId >
    < OppositeIn terfaceId > ri - bp12dxgw8g moma1h506q f </
    OppositeIn terfaceId >
    < VpcInstanc eId > vpc - 2ze3tq4uxh ysg717x7o4 d </
    VpcInstanc eId >
    < RouterId > vrt - 2zeazning6 tbzkm5c0jj 2 </ RouterId >
    < ConnectedT ime > 2017 - 12 - 27T06 : 31 : 36Z </ ConnectedT
    ime >
    < OppositeRe gionId > cn - hangzhou </ OppositeRe gionId >
    < BusinessSt atus > Normal </ BusinessSt atus >
    < Role > Initiating Side </ Role >
    < OppositeVp cInstanceI d > vpc - bp15k6sx6f hdz2jw4daz 0 </
    OppositeVp cInstanceI d >
    < EndTime > 2018 - 10 - 27T16 : 00 : 00Z </ EndTime >
    </ RouterInte rfaceType >
    </ RouterInte rfaceSet >
    < DescribeRo uterInterf acesRespon se >

```

· JSON format

```

{
  " PageNumber ": 1 ,
  " TotalCount ": 2 ,
  " PageSize ": 10 ,
  " RequestId ":" 01818199 - 04F6 - 47F4 - 9ADF - 7CC824CF57 A4 ",
  " RouterInte rfaceSet ":{
    " RouterInte rfaceType ":[
      {
        " ChargeType ":" Prepaid ",
        " HasReserva tionData ": false ,
        " OppositeIn terfaceBus inessStatu s ":" Normal ",
        " RouterInte rfaceId ":" ri - 2zenfgfpyu 3v93koa4sf o ",
        " OppositeIn terfaceSta tus ":" Deleted ",
        " Spec ":" Small . 5 ",
        " OppositeIn terfaceOwn erId ":" 1231579085 529123 ",
        " CrossBorde r ": false ,
        " OppositeIn terfaceSpe c ":" Negative ",
        " CreationTi me ":" 2017 - 12 - 27T06 : 34 : 30Z ",
        " RouterType ":" VRouter ",
        " Status ":" Inactive ",
        " OppositeRo uterId ":" vrt - bp1el837xk kakub7ci0t j ",
        " OppositeRo uterType ":" VRouter ",
        " OppositeIn terfaceId ":" ri - bp1itx13bw e6f2wfh3qp j ",
        " ConnectedT ime ":" 2017 - 12 - 27T06 : 34 : 37Z ",
        " RouterId ":" vrt - 2zeazning6 tbzkm5c0jj 2 ",

```

```

" VpcInstanc eId ":" vpc - 2ze3tq4uxh ysg717x7o4 d ",
" BusinessSt atus ":" Normal ",
" OppositeRe gionId ":" cn - hangzhou ",
" Role ":" Initiating Side ",
" EndTime ":" 2018 - 01 - 27T16 : 00 : 00Z ",
" OppositeVp cInstanceI d ":" vpc - bp1iq3579f 26c3gpkj92 e
"
},
{
" ChargeType ":" Prepaid ",
" HasReserva tionData ": false ,
" OppositeIn terfaceBus inessStatu s ":" Normal ",
" RouterInte rfaceId ":" ri - 2zegbp7nhj 0mnwm6irnu o ",
" OppositeIn terfaceSta tus ":" Deleted ",
" Spec ":" Small . 1 ",
" OppositeIn terfaceOwn erId ":" 1231579085 529123 ",
" CrossBorde r ": false ,
" OppositeIn terfaceSpe c ":" Negative ",
" CreationTi me ":" 2017 - 12 - 27T06 : 31 : 30Z ",
" RouterType ":" VRouter ",
" Status ":" Inactive ",
" OppositeRo uterId ":" vrt - bp1d3bxt dv 68tfd7gfjk d ",
" OppositeRo uterType ":" VRouter ",
" OppositeIn terfaceId ":" ri - bp12dxgw8g moma1h506q f ",
" ConnectedT ime ":" 2017 - 12 - 27T06 : 31 : 36Z ",
" RouterId ":" vrt - 2zeazning6 tbzkm5c0jj 2 ",
" VpcInstanc eId ":" vpc - 2ze3tq4uxh ysg717x7o4 d ",
" BusinessSt atus ":" Normal ",
" OppositeRe gionId ":" cn - hangzhou ",
" Role ":" Initiating Side ",
" EndTime ":" 2018 - 10 - 27T16 : 00 : 00Z ",
" OppositeVp cInstanceI d ":" vpc - bp15k6sx6f hdz2jw4daz 0
"
}
]
}
}

```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidFilterKey .ValueNotSupported	Specified filter key is not supported: Filter.X.key	The specified filter key is not supported.
400	InvalidParam. NotNull	The parameter must not be null.	The parameter cannot be null.

[See common error codes](#)

11.3 ConnectRouterInterface

Connects the initiator router interface to the acceptor router interface.

After you call this action, the router interface status changes to Connecting. After the connection is established, the router interface status changes to Active.

Note the following before you call this action:

- Only an initiator router interface in the Idle state can initiate a connection.
- Up to one pair of interconnected router interfaces can be created between any two routers.
- If there is an overdue router interface under the account, you cannot initiate a connection.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ConnectRouterInterface	The name of this action. Value: ConnectRouterInterface
RegionId	String	Yes	cn-hangzhou	The region where the router interface is located. To query the region ID, call DescribeRegions.
RouterInterfaceId	String	Yes	ri-2zeo3xzyf38r4urzdvpfs	The ID of initiator router interface.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	DE77A7F3-3B74-41C0-A5BC-CAFD188C28B6	The ID of the request.

Examples

Request example

```
http ( s ):// vpc . aliyuncs . com /? Action = ConnectRouterInterface
& RegionId = cn - hangzhou
& RouterInterfaceId = ri - 2zeo3xzyf3 8r4urzdpvf s
&< CommonParameters >
```

Response example

- XML format

```
< ConnectRouterInterfaceResponse >
  < RequestId > 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 </
  RequestId >
</ ConnectRouterInterfaceResponse >
```

- JSON format

```
{
  "RequestId ":" 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRouterInterfaceId.NotFound	The specified RouterInterfaceId does not exist in our record.	The specified router interface does not exist.

HTTP status code	Error code	Error message	Description
400	IncorrectRole. NotInitiatingSide	The specified RouterInterface is not InitiatingSide.	This router interface is not the initiator router interface. Select the initiator router interface to initiate a connection.
400	Forbidden. OnlyOneConnection	The Specified routers have a connection already	A peering connection already exists between the routers.
400	Forbidden. OnlyOneConnection	Cannot connect concurrently between same routers	You cannot initiate another connection between the same routers.
400	Forbidden. BillsOutstanding	You cannot use this action because you have bills outstanding.	You cannot continue with this operation because you have overdue payments.

[See common error codes](#)

11.4 ActivateRouterInterface

Activates a router interface in the Inactive state.

After you call this action, the router interface changes to the Activating state. Next, after activation is completed, the router interface changes to the Active state.



Note:

An overdue interface cannot be activated.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ActivateRouterInterface	The name of this action. Value: ActivateRouterInterface
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the router interface to be activated belongs. To query the region ID, call DescribeRegions.
RouterInterfaceId	String	Yes	ri-2zeo3xzyf38r4urzdvpfs	The ID of the router interface to be activated.

Response parameters

Parameters	Type	Example value	Description
RequestId	String	079874CD-AEC1-43E6-AC03-ADD96B6E4907	The ID of the request.

Examples

Request example

```
http ( s ) : // vpc . aliyuncs . com / ? Action = ActivateRouterInterface
& RegionId = cn - hangzhou
& RouterInterfaceId = ri - 2zeo3xzyf38r4urzdvpfs
& < CommonParameters >
```

Response example

· XML format

```
< ActivateRouterInterfaceResponse >
```

```
< RequestId > 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 </
RequestId >
</ ActivateRouterInterfaceResponse >
```

- JSON format

```
{
  "RequestId": "0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0"
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
404	InvalidRouterInterfaceId.NotFound	The specified RouterInterfaceId does not exist in our records.	The specified router interface does not exist.
400	IncorrectStatus	RouterInterface can be operated by this action only when it's status is Inactive.	This operation requires that the router interface is in the Inactive status.
400	Forbidden.FinancileLocked	This RouterInterface is financial locked because of bills outstanding.	The router interface is locked due to an insufficient account balance.
400	Forbidden	The Router instance owner error	This router does not belong to your account.

[See common error codes](#)

11.5 DeactivateRouterInterface

Deactivates a router interface.

After you call this action, the router interface changes to the Deactivating state. After deactivation is completed, the router interface changes to the Inactive state.



Note:

A router interface under an account with an insufficient balance cannot be deactivated.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeactivateRouterInterface	The name of this action. Value: DeactivateRouterInterface
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the router interface to be deactivated belongs. To query the region ID, call DescribeRegions.
RouterInterfaceId	String	Yes	ri-2zeo3xzyf38r4urzdps	The ID of the router interface.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	BE7EB53A-99AB-4DA8-AEDE-75FA90D046A6	The ID of the request.

Examples

Request example

```
http ( s ) : // vpc . aliyuncs . com / ? Action = DeactivateRouterInterface
& RegionId = cn - hangzhou
& RouterInterfaceId = ri - 2zeo3xzyf38r4urzdps
```

&< CommonParameters >

Response example

- XML format

```
< ActivateRouterInterfaceResponse >
  < RequestId > 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 </
    RequestId >
</ ActivateRouterInterfaceResponse >
```

- JSON format

```
{
  "RequestId": "0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0"
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRouterInterfaceId.NotFound	The specified RouterInterfaceId does not exist in our record.	The specified router interface does not exist.
400	IncorrectStatus	RouterInterface can be operated by this action only when it's status is Active.	You can perform this action only if the router interface is in the Active state.
400	Forbidden.FinancileLocked	This RouterInterface is financial locked because of bills outstanding.	The router interface is locked because your bill is overdue.

[See common error codes](#)

11.6 ModifyRouterInterfaceSpec

Modifies the specification of a router interface.

After you call this action, the router interface status changes to Activating. Next, after the activation is completed, the router interface status changes to Active.



Note:

The specification for a router interface under an account with an insufficient balance cannot be modified.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ModifyRouterInterfaceSpec	The name of this action. Value: ModifyRouterInterfaceSpec
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the router interface belongs. To query the region ID, call DescribeRegions.
RouterInterfaceId	String	Yes	ri-2zeo3xzyf38r4urzdvpfs	The ID of the router interface.
Spec	String	Yes	Large	The specification of the router interface.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	4EC47282-1B74-4534-BD0E-403F3EE64CAF	The ID of the request.

Parameter	Type	Example value	Description
Spec	String	Small.1	The specification of the router interface.

Examples

Request example

```
http ( s ):// vpc . aliyuncs . com /? Action = ModifyRouterInterfaceSpec
& RegionId = cn - hangzhou
& RouterInterfaceId = ri - 2zeo3xzyf3 8r4urzdpvf s
& Spec = Large
&< CommonParameters >
```

Response example

- XML format

```
< ModifyRouterInterfaceSpecResponse >
  < RequestId > 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 </
  RequestId >
  < Spec > Middle . 2 </ Spec >
</ ModifyRouterInterfaceSpecResponse >
```

- JSON format

```
{
  " Spec ":" Middle . 2 ",
  " RequestId ":" 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidSpec .ValudNotSupported	The specified Spec is not supported.	The specified specification is not supported.
404	InvalidRouterInterfaceId. NotFound	The specified RouterInterfaceId does not exist in our record.	The specified router interface does not exist.
400	InvalidInstanceOwner. Error	The router instance owner error.	The router does not belong to your account.

HTTP status code	Error code	Error message	Description
400	InvalidInstance.StatusError	The router instance owner error.	The status of the router interface is invalid.

[See common error codes](#)

11.7 ModifyRouterInterfaceAttribute

Modifies the configurations of a router interface.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ModifyRouterInterfaceAttribute	The name of this action. Value: ModifyRouterInterfaceAttribute
RegionId	String	Yes	cn-shanghai	The ID of the region to which the router interface belongs. To query the region ID, call DescribeRegions.
RouterInterfaceId	String	Yes	ri-2zeo3xzyf38r4urzdvpfs	The ID of the router interface.

Parameter	Type	Required?	Example value	Description
DeleteHealthCheckIp	Boolean	No	true	Indicates whether to delete the health check IP address configured on the router interface. Valid values: · true : Delete the health check IP. · false (default value): Do not delete the health check IP.
Description	String	No	Router interface 1	The description of the router interface. The description must be 2 to 256 characters in length. The description must start with a letter and cannot start with http :// or https ://.
HealthCheckSourceIp	String	No	116.62.222.28	The source IP address used to perform health check on the physical connection. It must be an unused IP address of the local VPC.  Note: You can specify this parameter in the scenario of physical access.
HealthCheckTargetIp	String	No	116.62.222.28	The destination IP address of health check.  Note: This parameter is required when the HealthCheckSourceIp parameter is specified.

Parameter	Type	Required?	Example value	Description
Name	String	No	TEST	The name of the router interface. The name must be 2 to 128 characters in length. It can contain letters, numbers, periods (.), underscores (_), and hyphens (-). The name must start with a letter and cannot start with <code>http ://</code> or <code>https ://</code> .
OppositeInterfaceId	String	No	ri-2zeo3xzyf38r4urzdvpfs	The ID of the peer router interface.
OppositeInterfaceOwnerId	String	No	10	The ID of the owner of the peer router interface.
OppositeRouterId	String	No	vrt-bp1jcg5cmxjbl9xgc58bw	The ID of the peer router.
OppositeRouterType	String	No	VRouter	The type of the router to which the peer router interface belongs. The default value is <code>VBR</code> . Valid values: <code>VRouter</code> <code>VBR</code>

Response parameters

Parameter	Type	Example value	Description
RequestId	String	4EC47282-1B74-4534-BD0E-403F3EE64CAF	The ID of the request.

Examples

Request example

```
http ( s ):// vpc . aliyuncs . com /? Action = ModifyRouteInterfaceAttribute
& RegionId = cn - shanghai
& RouterInterfaceId = ri - 2zeo3xzyf3 8r4urzdvpf s
&< CommonParameters >
```

Response example

- XML format

```
< ModifyRouteInterfaceAttribute Response >
  < RequestId > 980960B0 - 2969 - 40BF - 8542 - EBB34FD358 AB </
  RequestId >
</ ModifyRouteInterfaceAttribute Response >
```

- JSON format

```
{
  "RequestId ":" 980960B0 - 2969 - 40BF - 8542 - EBB34FD358 AB "
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
404	InvalidRouterInterfaceId.NotFound	The specified RouterInterfaceId does not exist in our records.	The specified router interface does not exist.
400	Forbidden.FinancileLocked	This RouterInterface is financial locked because of bills outstanding.	The router interface is locked due to an insufficient account balance.
400	InvalidName.Malformd	The attribute name is illegal.	The name format is invalid.
400	InvalidOppositeRouterType.ValueNotSupported	The specified OppositeRouterType is not valid.	The value of the OppositeRouterType parameter is invalid.

HTTP status code	Error code	Error message	Description
400	InvalidDescription.Malformed	The Description is illegal.	The format of the resource description is invalid. The description must be 2 to 256 characters in length, and it cannot start with http:// and https://.
400	Forbidden	The Router instance owner error	The specified router is not under your account.
400	LinkRole.NotSupport	This linkrole is not supported	This link is not supported.
400	InvalidParameter.ModifyRouterInterface	Modify routerinterface param invalide	The entered parameter is invalid.

[See common error codes](#)

11.8 DeleteRouterInterface

Deletes a router interface.

Note the following before you delete a router interface:

- You can only delete a router interface in the Idle or Inactive state.
- Before deleting a router interface, you must delete all custom route entries pointing to it.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteRouterInterface	The name of this action. Value: DeleteRouterInterface
RegionId	String	Yes	cn-shanghai	The ID of the region to which the router interface belongs. To query the region ID, call DescribeRegions.
RouterInterfaceId	String	Yes	ri-2zeo3xzyf38r4urzdvpfs	The ID of the router interface.
ClientToken	String	No	qwefcc12123333334f	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	4EC47282-1B74-4534-BD0E-403F3EE64CAF	The ID of the request.

Examples

Request example

```
http ( s ) : // vpc . aliyuncs . com / ? Action = DeleteRouterInterface
& RegionId = cn - shanghai
```

```
& RouterInterfaceId = ri - 2zeo3xzyf3 8r4urzdpvf s
&< CommonParameters >
```

Response example

• XML format

```
< DeleteRouterInterfaceResponse >
  < RequestId > 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 </
  RequestId >
</ DeleteRouterInterfaceResponse >
```

• JSON format

```
{
  "RequestId ":" 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	IncorrectStatus	This operation would be allowed only when status of this RouterInterface is Idle/Inactive.	This operation cannot be performed because the router interface is not in the Idle or Inactive state.
400	Dependency Violation. RouterInterfaceReferedByRouteEntry	RouterInterface cannot be deleted when it is referred by a route table entry as next hop.	You cannot delete this router interface because a route entry is using it as the next hop. You need to delete the route entry before you can delete this router interface.
404	InvalidInstanceId. NotFound	The InstanceId provided does not exist in our records.	The specified ECS instance does not exist. That is, the instance is not under the VPC.
400	InvalidRouterInterfaceChargeType. Malformed	The prepaid routerinterface can not delete.	You cannot delete a Subscription router interface.

[See common error codes](#)

12 Virtual Border Router

12.1 CreateVirtualBorderRouter

Creates a Virtual Border Router (VBR).

If you create a VBR for your account, the VBR is in the Enabled state after being created. Next, if you create a VBR for another account, the VBR is in the Unconfirmed state after being created and confirmation by the account is required.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreateVirtualBorderRouter	The name of this action. Value: CreateVirtualBorderRouter
PhysicalConnectionId	String	Yes	pc-xxxxxxxx	The ID of the physical connection.
RegionId	String	Yes	cn-shanghai	The ID of the region to which the physical connection belongs. To query the region ID, call DescribeRegions.

Parameter	Type	Required?	Example value	Description
VlanId	String	Yes	10	The VLAN ID of the VBR. Value range: 1 to 2999.  Note: Only the owner of the physical connection can specify this parameter. The VLAN IDs of two VBRs of the same physical connection must be different.
CircuitCode	String	No	longtel001	The circuit code provided by the service provider for the physical connection.  Note: Only the owner of the physical connection can specify this parameter.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	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. It must be 1 to 64 ASCII characters in length.
Description	String	No	The description of the VBR	The description of the VBR. The description must be 2 to 256 characters in length. It must start with a letter and cannot start with <code>http</code> <code>://</code> or <code>https</code> <code>://</code>.

Parameter	Type	Required?	Example value	Description
LocalGatewayIp	String	No	116.62.222.28	The Alibaba Cloud-side IP address of the VBR.
Name	String	No	test	The name of the VBR. The name must be 2-128 characters in length. It can contain letters, numbers, periods (.), underscores (_), and hyphens (-). It must start with a letter and cannot start with <code>http ://</code> or <code>https ://</code>.
PeerGatewayIp	String	No	116.62.222.28	The client-side IP address of the VBR. Only the VBR owner can specify or modify this parameter. The client-side IP address of the VBR is required when you create a VBR for the physical connection owner, and it cannot be specified when you create a VBR for another account.
PeeringSubnetMask	String	No	255.255.255.252	The subnet mask for the Alibaba Cloud-side IP address and the client-side IP address. The two IP addresses must be in the same subnet.
VbrOwnerId	String	No	10	The account ID of the VBR owner. The default value is account ID of the current user, namely the owner of the physical connection.

Response parameters

Parameter	Type	Example value	Description
VbrId	String	vbr-bp1jcg5cmxjbl9xgc58bw	The ID of the VBR.
RequestId	String	4EC47282-1B74-4534-BD0E-403F3EE64CAF	The ID of the request.

Examples

Request example

```
http ( s ):// vpc . aliyuncs . com /? Action = CreateVirtualBorderRouter
& PhysicalConnectionId = pc - xxxxxxxxx
& RegionId = cn - shanghai
& VlanId = 10
&< CommonParameters >
```

Response example

• XML format

```
< CreateRouterInterfaceResponse >
  < RequestId > 980960B0 - 2969 - 40BF - 8542 - EBB34FD358 AB </
  RequestId >
  < VbrId > vbr - 2zecmmvg5g vu8i4telkh w </ VbrId >
</ CreateRouterInterfaceResponse >
```

• JSON format

```
{
  " CreateRouterInterfaceResponse ":{
    " RequestId ":" 980960B0 - 2969 - 40BF - 8542 - EBB34FD358 AB ",
    " VbrId ":" vbr - 2zecmmvg5g vu8i4telkh w "
  }
}
```

}

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId is not found.	The specified region ID does not exist.
400	InvalidPhysicalConnectionId.NotFound	The specified PhysicalConnectionId is not found.	The physical connection ID does not exist.
400	InvalidVlanId.Used	The specified VlanId has been used.	The specified VLAN is already occupied.
400	MissingParameter	The input parameter 'PhysicalConnectionId' that is mandatory for processing this request is not supplied.	The PhysicalConnectionId parameter must be specified.
400	InvalidPhysicalConnectionId.NotEnabled	The specified PhysicalConnectionId is not in Enabled state.	The physical connection is not in the Enabled status.
404	InvalidVbrOwnerId.NotFound	The specified VbrOwnerId is not valid.	The value of the VbrOwnerId parameter is invalid.
400	InvalidVlanId.Malformed	The specified VlanId is not valid.	The value of the VbrOwnerId parameter is invalid.
400	InvalidCircuitCode.Malformed	The specified CircuitCode is not valid.	The specified CircuitCode is invalid.
400	MissingParameter	The input parameter 'LocalGatewayIp' that is mandatory for processing this request is not supplied.	The LocalGatewayIp parameter is required.

HTTP status code	Error code	Error message	Description
400	InvalidLocalGatewayIp.Malformed	The specified LocalGatewayIp is not valid.	The specified local gateway IP address is invalid.
400	MissingParameter	The input parameter 'PeerGatewayIp' that is mandatory for processing this request is not supplied.	The PeerGatewayIp parameter is required.
400	MissingParameter	The input parameter 'PeeringSubnetMask' that is mandatory for processing this request is not supplied.	The PeeringSubnetMask parameter must be specified.
400	InvalidPeeringSubnetMask.Malformed	The specified PeeringSubnetMask is not valid.	The specified PeeringSubnetMask parameter is invalid.
403	Forbidden.LocalGatewayIpNotAllowedByCaller	The caller is not allowed to specify the LocalGatewayIp parameter.	You are not allowed to specify the LocalGatewayIp parameter.
403	Forbidden.PeeringSubnetMaskNotAllowedByCaller	The caller is not allowed to specify the PeeringSubnetMask parameter.	You are not allowed to specify the PeeringSubnetMask parameter.
403	Forbidden.DescriptionNotAllowedByCaller	The caller is not allowed to specify the Description parameter.	You are not allowed to specify the Description parameter.
400	InvalidName.Malformed	The specified ?Name? is not valid.	The name format is invalid.
400	InvalidDescription.Malformed	The specified ?Description? is not valid.	The description format is invalid. The description must be 2 to 256 characters in length. It cannot start with http:// and https://.

HTTP status code	Error code	Error message	Description
400	QuotaExceeded.vbrPerpConn	Virtual boarder router per PhysicalConnection quota exceed.	The VBR quota for the physical connection is exceeded.
400	InvalidIp.NotSameSubnet	Local gateway ip and peer gateway ip are not in the same subnet.	The local gateway IP address and the peer gateway IP address are not in the same subnet.
404	CROSS_BID.FORBIDDEN	Create VBR across bid is illegal	You cannot create a VBR for a user of another site.

[See common error codes](#)

12.2 DeleteVirtualBorderRouter

Delete a VBR.

Note the following before deleting a VBR:

- You must delete all router interfaces on the VBR.
- You can only delete a VBR in the Unconfirmed, Enabled, or Terminated status.
- If the VBR you want to delete is under another Alibaba Cloud account, the VBR must be in the Unconfirmed status.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs. API Explorer can help reduce possible difficulty with using cloud APIs. We recommend that you use API Explorer.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteVirtualBorderRouter	The action to perform. Valid value: DeleteVirtualBorderRouter
RegionId	String	Yes	cn-shanghai	The ID of the region where the VBR is located. You can obtain the region ID by calling the DescribeRegions API.
VbrId	String	Yes	vbr-bp12mw1f8k3jgygk9bmlj	The ID of the VBR.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It cannot exceed 64 ASCII characters.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	F8BF7D24-F3EB-4E23-9208-B77C6EB78E75	The ID of the request.

Examples

Request example

```
http ( s ):// vpc . aliyuncs . com /? Action = DeleteVirt
ualBorderR outer
& RegionId = cn - shanghai
& VbrId = vbr - bp12mw1f8k 3jgygk9bml j
&< CommonPara meters >
```

Response example

- XML format

```
< DeleteVirt ualBorderR outerRespo nse >
  < RequestId > 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 </
  RequestId >
</ DeleteVirt ualBorderR outerRespo nse >
```

- JSON format

```
{
  " RequestId ":" 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 "
}
```

Error codes

HttpCode	Error code	Error message	Description
404	InvalidVbrId. NotFound	The specified VirutalBor derRouter does not exist in our records.	The specified VBR does not exist.
400	InvalidOperation .RouterInte rfaceNotDeleted	The specified VirutalBor derRouter still has routerInterface.	The specified VBR has associated router interfaces.
400	InvalidOperation .OperationN otAllowedInState	The specified VirutalBor derRouter is in invalid state.	The status of the VBR is invalid.
403	Forbidden. OperationN otAllowedByUser	The caller is not allowed to delete the specified VirtualBorderRouter.	You are not allowed to delete the VBR.
403	Forbidden. MultiVlanRi	Multiple vlan router interfaces are found.	Multiple VLAN router interfaces exist.
400	InvalidStatus. NotAllowed	The virtual border has been associated by physicalConnection.	The VBR has associated with a physical connection.

[View the error codes of the product](#)

12.3 DescribeVirtualBorderRouters

Queries one or more Virtual Border Routers (VBRs).

Debug

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

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Required	DescribeVirtualBorderRouters	The name of this action. Value: DescribeVirtualBorderRouters.
RegionId	String	Yes	cn-shanghai	The ID of the region where the VBR is located. To query the region ID, call DescribeRegions .
Filter . N . Key	String	No	1	The type of the nth filter. Value range of n: 1 to 5.
Filter . N . Value . N	RepeatList	No	1	The mth value of the nth filter. Value range of m: 1 to 5.
PageNumber	Integer	No	10	The number of pages to return. Default value: 1.
PageSize	Integer	No	1	The number of rows per page. Maximum value: 50. Default value: 10.

Response parameters

Parameter	Type	Example value	Description
VirtualBorderRouterSet			A list of VBRs.

Parameter	Type	Example value	Description
<code>└AccessPointId</code>	String	ap-cn-kojok1xxxxxxxx	The ID of the physical connection access point.
<code>└ActivationTime</code>	String	2017-06-08T12:20:55	The first time at which the VBR was activated.
<code>└AssociatedCens</code>			The associated CEN instances.
<code>└CenId</code>	String	cen-kojok19xxxxxxx	The ID of the CEN instance.
<code>└CenOwnerId</code>	Long	1086496381294461	The UID of the account to which the CEN instance belongs.
<code>└CenStatus</code>	String	Attached	The status of the CEN instance.
<code>└AssociatedPhysicalConnections</code>			The associated physical connections.
<code>└CircuitCode</code>	String	12	The circuit code provided by the service provider for the physical connection-side interface of the VBR.
<code>└LocalGatewayIp</code>	String	116.62.xx.xx	The local IP address of the physical connection-side interface of the VBR.
<code>└PeerGatewayIp</code>	String	116.62.xx.xx	The peer IP address of the physical connection-side interface of the VBR.
<code>└PeeringSubnetMask</code>	String	255.255.255.252	The subnet mask for the local and peer IP addresses of the physical connection-side interface of the VBR.

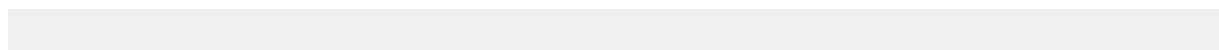
Parameter	Type	Example value	Description
<code>PhysicalConnectionBusinessStatus</code>	String	Normal	The status of the physical connection.
<code>PhysicalConnectionId</code>	String	pc-119mfjzm7xxxxxxx	The ID of the physical connection to which the VBR belongs.
<code>PhysicalConnectionOwnerId</code>	String	qfrgrgs	The UID of the owner of the physical connection.
<code>PhysicalConnectionStatus</code>	String	Normal	The status of the physical connection.
<code>VlanId</code>	String	0	The VLAN ID of the VBR.
<code>VlanInterfaceId</code>	String	ri-kojok19x3j0q6kxxxxxxxxxx	The ID of the physical connection-side interface of the VBR. This route interface can operate as the next hop of routes on the VBR.
<code>CircuitCode</code>	String	longtel001	The circuit code provided by the service provider for the physical connection.
<code>CreationTime</code>	String	2017-06-08T12:20:55	The time at which the VBR was created.
<code>Description</code>	String	VBR	The description of the VBR.
<code>DetectMultiplier</code>	Long	3	The multiple of the detection time. The Max Connection packet loss allowed by the receiver. It is used to detect if the link is normal. Value range: 3 to 10.
<code>LocalGatewayIp</code>	String	116.62.xx.xx	The Alibaba Cloud-side IP address.

Parameter	Type	Example value	Description
$\perp$ MinRxInterval	Long	100	The BFD packet receiving interval. Value range: 200 to 1,000. Unit: ms.
$\perp$ MinTxInterval	Long	100	The BFD packet sending interval. Value range: 200 to 1,000. Unit: ms.
$\perp$ Name	String	test	The name of the VBR.
$\perp$ PeerGatewayIp	String	116.62.xx.xx	The client-side IP address.
$\perp$ PeeringSubnetMask	String	255.255.255.252	The subnet mask for the Alibaba Cloud-side IP address and the client-side IP address.
$\perp$ PhysicalConnectionBusinessStatus	String	Normal	The business status of the physical connection.
$\perp$ PhysicalConnectionId	String	pc-119mfjzm7xxxxxxx	The ID of the physical connection to which the VBR belongs.
$\perp$ PhysicalConnectionOwnerId	String	usdgbh123fvgf	The UID of the owner of the physical connection.
$\perp$ PhysicalConnectionStatus	String	Normal	The status of the physical connection.
$\perp$ RecoveryTime	String	2017-06-08T12:20:55	The last time at which the VBR recovered from the Terminated status to the Active status.
$\perp$ RouteTableId	String	rtb-bp1nxxxxxxx xxxxxxxxxxx	The ID of the route table of the VBR.

Parameter	Type	Example value	Description
↳Status	String	active	The status of the physical connection: • Initial: applying • Approved: approved • Allocating: allocating resources • Allocated: access construction • Confirmed: waiting for user confirmation • Enabled: enabled • Rejected: rejected • Canceled: canceled • Allocation Failed: resource allocation failed • Terminated: terminated
↳TerminationTime	String	2017-06-08T12:20:55	The last time at which the VBR was terminated.
↳VbrId	String	vbr-kojok19xxx xxxxxxx	The ID of the VBR.
↳VlanId	Integer	10	The VLAN ID of the VBR.
↳VlanInterfaceId	String	ri-2zeo3xzyf3 8r4xxxxxxxxx	The ID of the router interface of the VBR.
TotalCount	Integer	10	The number of queried entries.
PageNumber	Integer	10	The current page number.
PageSize	Integer	10	The number of entries per page.
RequestId	String	DE77A7F3-3B74-41C0-A5BC-CAFD188C28B6	The ID of the request.

Examples

Request example



```
http ( s ):// vpc . aliyuncs . com /? Action = DescribeVirtualBorderRouters
& RegionId = cn - shanghai
&< CommonParameters >
```

Response example

XML format

```
< DescribeVirtualBorderRoutersResponse >
  < RequestId > AE65530E - 8436 - 4FB1 - 8217 - DCD35712AC 89 </
  RequestId >
  < PageNumber > 1 </ PageNumber >
  < VirtualBorderRouterSet >
    < VirtualBorderRouterType >
      < LocalGatewayIp > 10 . 1 . xx . xx </ LocalGatewayIp >
      < PeerGatewayIp > 10 . 2 . xx . xx </ PeerGatewayIp >
      < PhysicalConnectionOwnerUid > 123157908X XXXXXXXX </
      PhysicalConnectionOwnerUid >
      < VlanId > 10 </ VlanId >
      < PhysicalConnectionStatus > Enabled </ PhysicalConnectionStatus >
      < PhysicalConnectionId > pc - 2zeoaxkq3j otxxxxxxxx </
      PhysicalConnectionId >
      < RouteTableId > vtb - 2ze9hmd6yo fwvxxxxxxxx x </
      RouteTableId >
      < PeeringSubnetMask > 255 . 0 . 0 . 0 </ PeeringSubnetMask >
      < CreationTime > 2018 - 03 - 06T11 : 16 : 34Z </ CreationTime >
      < ActivationTime > 2018 - 03 - 06T11 : 16 : 34Z </ ActivationTime >
      < Status > active </ Status >
      < PhysicalConnectionBusinessStatus > Normal </ PhysicalConnectionBusinessStatus >
      < VlanInterfaceId > ri - 2zeum6rgu0 586xxxxxxxx x </
      VlanInterfaceId >
      < AccessPointId > ap - cn - beijing - dx - A </ AccessPointId >
      < VbrId > vbr - 2zecmmvg5g xxxxxxxx </ VbrId >
    </ VirtualBorderRouterType >
  </ VirtualBorderRouterSet >
  < TotalCount > 1 </ TotalCount >
  < PageSize > 10 </ PageSize >
</ DescribeVirtualBorderRoutersResponse >
```

JSON format

```
{
  "DescribeVirtualBorderRoutersResponse":{
    "PageNumber": "1",
    "VirtualBorderRouterSet":{
      "VirtualBorderRouterType":{
        "LocalGatewayIp": "10 . 1 . xx . xx",
        "PeerGatewayIp": "10 . 2 . xx . xx",
        "PhysicalConnectionOwnerUid": "123157908X XXXXXXXX",
        "VlanId": "10",
        "PhysicalConnectionStatus": "Enabled",
        "PhysicalConnectionId": "pc - 2zeoaxkq3j otxxxxxxxx",
        "RouteTableId": "vtb - 2ze9hmd6yo fwvxxxxxxxx x",
        "PeeringSubnetMask": "255 . 0 . 0 . 0",
        "CreationTime": "2018 - 03 - 06T11 : 16 : 34Z",

```

```

    " Activation Time ":" 2018 - 03 - 06T11 : 16 : 34Z ",
    " Status ":" active ",
    " PhysicalCo nnectionBu sinessStat us ":" Normal ",
    " VlanInterf aceId ":" ri - 2zeum6rgu0 586xxxxxxx x ",
    " VbrId ":" vbr - 2zecmmvg5g xxxxxxxx ",
    " AccessPoin tId ":" ap - cn - beijing - dx - A "
  }
},
" TotalCount ": " 1 ",
" PageSize ": 10 ,
" RequestId ":" AE65530E - 8436 - 4FB1 - 8217 - DCD35712AC 89 "
}
}

```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidFilterKey .ValueNotSupported	Specified filter key is not supported: Filter.X.key	The key of the filter does not support: Filter.X.key

[See common error codes](#)

12.4 DescribeVirtualBorderRoutersForPhysicalConnection

Query the Virtual Border Routers created for a physical connection.

Request parameters

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: DescribeVirtualBorderRoutersForPhysicalConnection
RegionId	String	Yes	The region of the physical connection. You can obtain the region ID by calling the DescribeRegions API.
PhysicalConnectionId	String	No	The ID of the physical connection.

Name	Type	Required	Description
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.
VirtualBorderRouterForPhysicalConnectionSet	List	A list of VBRs.

Table 12-1: VirtualBorderRouterForPhysicalConnection

Name	Type	Description
VbrId	String	The ID of the VBR.
VbrOwnerId	String	The account ID of the VBR owner. This parameter is empty when the VBR owner and the physical connection owner are the same.
CreationTime	Integer	The time when the VBR is created.
ActivationTime	String	The first time when the VBR was activated.
TerminationTime	String	The last time when the VBR was terminated.
RecoveryTime	String	The last time when the VBR recovered from the Terminated status to the Active status.
VlanId	String	The VLAN ID of the VBR.

Name	Type	Description
CircuitCode	String	The circuit code provided by the carrier for the physical connection.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DescribeVirtualBorderRoutersForPhysicalConnection
&RegionId=cn-beijing
&PhysicalConnectionId=pc-2zeoaxkq3j-xxxxx
&CommonParameters
```

Response example

• XML format

```
<?xml version="1.0" encoding="UTF-8"?>
  <DescribeVirtualBorderRoutersForPhysicalConnectionResponse>
    <RequestId>03E8CB87-5876-4034-BBB2-6E0851281C37</RequestId>
    <PageNumber>1</PageNumber>
    <TotalCount>2</TotalCount>
    <PageSize>10</PageSize>
    <VirtualBorderRouterForPhysicalConnectionSet>
      <VirtualBorderRouterForPhysicalConnectionType>
        <ActivationTime>2018-03-06T11:16:34Z</ActivationTime>
        <CreationTime>2018-03-06T11:16:34Z</CreationTime>
        <CircuitCode></CircuitCode>
        <VlanId>10</VlanId>
        <RecoveryTime></RecoveryTime>
        <VbrOwnerUsername>xx231579085529123</VbrOwnerUsername>
        <TerminationTime></TerminationTime>
        <VbrId>Vbrxxxxx-2zecmmvg5gvu8i4telkhw</VbrId>
      </VirtualBorderRouterForPhysicalConnectionType>
      <VirtualBorderRouterForPhysicalConnectionType>
        <ActivationTime>2018-01-04T13:34:18Z</ActivationTime>
        <CreationTime>2018-01-04T13:34:18Z</CreationTime>
        <CircuitCode></CircuitCode>
        <VlanId>100</VlanId>
        <RecoveryTime></RecoveryTime>
        <VbrOwnerUsername>1231579085529123</VbrOwnerUsername>
        <TerminationTime></TerminationTime>
        <VbrId>vbr-2zee2e2cwe tx4k0tohakw</VbrId>
      </VirtualBorderRouterForPhysicalConnectionType>
    </DescribeVirtualBorderRoutersForPhysicalConnectionResponse>
```

• JSON format

```
"PageNumber": 1,
"TotalCount": 2,
"Pagesize": 10,
```

```

" RequestId ": " 03E8CB87 - 5876 - 4034 - BBB2 - 6E0851281C 37
",
" VirtualBorderRouterForPhysical Connection Set ": {
  " VirtualBorderRouterForPhysical Connection Type ": [
    " Activation Time ": " 2018 - 03 - 06T11 : 16 : 34Z
  ",
    " CreationTime ": " 2018 - 03 - 06T11 : 16 : 34Z
  ",
    " CircuitCode ": "",
    " VlanId ": 10 ,
    " RecoveryTime ": "",
    " VbrOwnerId ": " 1231579085 xxxxxx5291 23 ",
    " TerminationTime ": "",
    " VbrId ": " vbr - 2zecmmvg5g vu8xxxxw "

    " Activation Time ": " 2018 - 01 - 04T13 : 34 : 18Z
  ",
    " CreationTime ": " 2018 - 01 - 04T13 : 34 : 18Z
  ",
    " PortIdentifier ": "",
    " VlanId ": 100 ,
    " RecoveryTime ": "",
    " VbrOwnerId ": " 1231579085 xxx ",
    " TerminationTime ": "",
    " VbrId ": " vbr - 2zee2e2cwe tx4k0txxxx akw "
  ]
}

```

12.5 ModifyVirtualBorderRouterAttribute

Modifies the configurations of a VBR.

Note the following before you call this API:

- The VLAN ID can only be modified by the owner of the physical connection.
- A VLAN ID of a physical connection cannot be used by two VBRs at the same time.
- After a VBR enters the Terminated state, its VLAN ID is retained for seven days and is not allowed to be used by other VBRs during this period. It can be used by other VBRs seven days after the termination of the VBR.
- You cannot configure the LocalGatewayIp, PeerGatewayIp, and PeeringSubnetMask for VBRs that belong to other accounts.

- Requirements on LocalGatewayIp, PeerGatewayIp, and PeeringSubnetMask are as follows:
 - PeeringSubnetMask can be in the range of /24 to /30.
 - PeeringSubnetMask supports dotted decimal notation and can be in the range of 255.255.255.0 to 255.255.255.252.
 - LocalGatewayIp and PeerGatewayIp must be in the same CIDR block.

For example,

- LocalGatewayIp: 192.168.xx. 17
- PeerGatewayIp: 192.168.xx. 18
- PeeringSubnetMask: 255.255.255.248

Debug

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

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ModifyVirtualBorderRouterAttribute	The name of this action. Value: ModifyVirtualBorderRouterAttribute
RegionId	String	Yes	cn-shanghai	The ID of the region to which the VBR belongs. To query the region ID, call DescribeRegions .
VbrId	String	Yes	vbr- *****	The ID of the VBR.
AssociatedPhysicalConnections	String	No	pc-kojok19xxx xxxxxx	Optional. The ID of the physical connection.

Parameter	Type	Required?	Example value	Description
CircuitCode	String	No	longtel001	Optional. The circuit code provided by the service provider for the physical connection.  Note: This parameter can only be specified by the owner of the physical connection.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-00xxxxxxxx	Optional. Guarantees the idempotence of the request. The value of this parameter is generated by the client. The value is unique among different requests and is 1 to 64 ASCII characters in length.
Description	String	No	VBR	Optional. The description of the VBR. 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> .
DetectMultiplier	Long	No	3	Optional. The multiplier of the detection time, that is, the maximum number of discarded connection packets that the receiver allows from the sender. Value range: 3 to 10.

Parameter	Type	Required?	Example value	Description
LocalGatewayIp	String	No	116.62.xx.xx	Optional. The Alibaba Cloud-side IP address used by the VBR.
MinRxInterval	Long	No	100	Optional. The time interval between two consecutive BFD packets that are received. Value range: 200 to 1000. Unit: ms
MinTxInterval	Long	No	100	Optional. The time interval between two consecutive BFD packets that are sent. Value range: 200 to 1000. Unit: ms
Name	String	No	test	The name of the VBR. The name must be 2 and 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> .
PeerGatewayIp	String	No	120.120.xx.xx	The customer-side IP address used by the VBR. Only the VBR owner can specify or modify this parameter. For VBRs in the Enabled state, you cannot leave this parameter empty.

Parameter	Type	Required?	Example value	Description
PeeringSubnetMask	String	No	255.255.128.0	The subnet mask of the Alibaba Cloud-side IP address and the customer-side IP address. The two IP addresses must be in the same subnet.
VlanId	Integer	No	12	The VLAN ID of the VBR. Value range: 1 to 2999.  Note: This parameter can only be specified by the owner of the physical connection. The VLAN IDs of two VBRs associated with the same physical connection must be different.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	980960B0-2969-40BF-8542-EBB34FD358AB	The ID of the request.

Examples

Request example

```
http ( s ):// vpc . aliyuncs . com /? Action = ModifyVirtualBorderRouterOuterAttribute
& RegionId = cn - shanghai
& VbrId = vbr - 123456
& Name = test
&< CommonParameters >
```

Response examples

XML format

```
< ModifyVirtualBorderRouterOuterAttributeResponse >
```

```
< RequestId > 980960B0 - 2969 - 40BF - 8542 - EBB34FD358 AB </
  RequestId >
</ ModifyVirtualBorderRouterAttributeResponse >
```

JSON format

```
{
  "RequestId ":" 980960B0 - 2969 - 40BF - 8542 - EBB34FD358 AB "
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId is not found.	The specified region ID is invalid. Please check if the cloud service is available in the specified region.
400	InvalidVbrId.NotFound	The specified VirtualBorderRouter is not found.	The specified VBR does not exist.
400	InvalidVlanId.Used	The specified VlanId has been used.	The specified VLAN is being used.
400	InvalidCircuitCode.Malformed	The specified CircuitCode is not valid.	The specified value of the CircuitCode parameter is invalid.
400	InvalidVlanId.Malformed	The specified VlanId is not valid.	The specified value of the VlanId parameter is invalid.
400	InvalidIp.Malformed	The specified ip address is not valid.	The specified private IP address is invalid.
400	InvalidPeeringSubnetMask.Malformed	The specified PeeringSubnetMask is not valid.	The specified value of the PeeringSubnetMask parameter is invalid.
403	Forbidden.CircuitCodeNotAllowedByCaller	The caller is not allowed to modify.	You are not allowed to modify the CircuitCode parameter.
403	Forbidden.CircuitCodeNotAllowedByCaller	The caller is not allowed to specify the CircuitCode parameter.	You are not allowed to specify the CircuitCode parameter.

HTTP status code	Error code	Error message	Description
403	Forbidden. LocalGatewayIpNotAllowedByCaller	The caller is not allowed to specify the LocalGatewayIp parameter.	You are not allowed to specify the LocalGatewayIp parameter.
403	Forbidden. PeerGatewayIpNotAllowedByCaller	The caller is not allowed to specify the PeerGatewayIp parameter.	You are not allowed to specify the PeerGatewayIp parameter.
403	Forbidden. PeeringSubnetMaskNotAllowedByCaller	The caller is not allowed to specify the PeeringSubnetMask parameter.	You are not allowed to specify the PeeringSubnetMask parameter.
403	Forbidden. VlanIdNotAllowedByCaller	The caller is not allowed to specify the VlanId.	You are not allowed to specify the VLAN ID.
403	Forbidden. NameNotAllowedByCaller	The caller is not allowed to specify the Name parameter.	You are not allowed to specify the Name parameter.
403	Forbidden. DescriptionNotAllowedByCaller	The caller is not allowed to specify the Description parameter.	You are not allowed to specify the Description parameter.
400	InvalidIp. NotSameSubnet	Local gateway ip and peer gateway ip are not in the same subnet.	The local gateway IP address and the peer gateway IP address are not in the same subnet.

[See common error codes.](#)

12.6 TerminateVirtualBorderRouter

Terminate the Virtual Border Router (VBR).

After the API is called, the VBR status will be changed from the Enabled status to the Terminated state.

**Note:**

Only the owner of the physical connection to which the VBR is connected can call the API.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs. API Explorer can help reduce possible difficulty with using cloud APIs. We recommend that you use API Explorer.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	TerminateVirtualBorderRouter	The action to perform. Valid value: TerminateVirtualBorderRouter
RegionId	String	Yes	cn-shanghai	The ID of the region where the VBR is located. You can obtain the region ID by calling the DescribeRegions API.
VbrId	String	Yes	vbr-bp15zckdt37pq72zvw3	The ID of the VBR.

Parameter	Type	Required?	Example value	Description
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	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

Parameter	Type	Example value	Description
RequestId	String	4EC47282-1B74-4534-BD0E-403F3EE64CAF	The ID of the request.

Examples

Request example

```
http ( s ) : // vpc . aliyuncs . com / ? Action = TerminateVirtualBorderRouter
& RegionId = cn - shanghai
& VbrId = vbr - bp15zckdt3 7pq72zvw3
& < CommonParameters >
```

Response example

· XML format

```
< TerminateVirtualBorderRouterResponse >
  < RequestId > 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 < /
  RequestId >
```

```
</ TerminateVirtualBorderRouterResponse >
```

- JSON format

```
{  
  "RequestId ":" 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 "  
}
```

Error codes

HTTP code	Error code	Error message	Description
404	InvalidVbrId.NotFound	The specified VirtualBorderRouter is not found.	The specified VBR does not exist.
400	InvalidOperation.OperationNotAllowedInState	The specified VirtualBorderRouter is in invalid state.	The status of the VBR is invalid.
403	Forbidden.OperationNotAllowedByUser	The caller is not allowed to terminate the specified VirtualBorderRouter.	You are not allowed to terminate the VBR.

[View the error codes of the product](#)

12.7 RecoverVirtualBorderRouter

Recover a terminated Virtual Border Router (VBR).

After the API is called, the VBR status will immediately change from the Terminated state to the Recovering state. Then, when the operation is completed, the status of the VBR is Enabled.

Note the following before recovering a VBR:

- Only the owner of the physical connection can call this API.
- The physical connection that the VBR connects to must be in the Enabled state.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs. API Explorer can help reduce possible difficulty with using cloud APIs. We recommend that you use API Explorer.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	RecoverVirtualBorderRouter	The action to perform. Valid value: RecoverVirtualBorderRouter
RegionId	String	Yes	cn-shanghai	The ID of the region where the VBR is located. You can obtain the region ID by calling the DescribeRegions API.
VbrId	String	Yes	vbr-bp1lhl0taikrteen80	The ID of the VBR.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	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

Parameter	Type	Example value	Description
RequestId	String	4EC47282-1B74-4534-BD0E-403F3EE64CAF	The ID of the request.

Examples

Request example

```
http ( s ):// vpc . aliyuncs . com /? Action = RecoverVir
tualBorder Router
& RegionId = cn - shanghai
& VbrId = vbr - bp1lhl0tai krteen80
&< CommonPara meters >
```

Response example

- XML format

```
< RecoverVir_tualBorder_RouterResp_onse >
  < RequestId > 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 </
  RequestId >
</ RecoverVir_tualBorder_RouterResp_onse >
```

- JSON format

```
{
  "RequestId ":" 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 "
}
```

Error codes

HTTP code	Error code	Error message	Description
404	InvalidVbrId.NotFound	The specified VirutalBorderRouter is not found.	The specified VBR does not exist.
400	InvalidOperation.OperationNotAllowedInState	The specified VirutalBorderRouter is in invalid state	The current status of the VBR does not support this operation.
400	OperationFailed.VlanIdAlreadyInUse	The specifed vlanId has been used.	The specified VLAN is already occupied.
403	Forbidden.OperationNotAllowedByUser	The caller is not allowed to recover the specified VirtualBorderRouter.	You are not allowed to recover the VBR.

[View the error codes of the product](#)

13 VPN Gateway

13.1 CreateVpnGateway

Creates a VPN Gateway.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreateVpnGateway	The action to perform. Valid value: CreateVpnGateway
Bandwidth	Integer	Yes	5	The bandwidth in Mbps of the VPN Gateway. Valid values: 5 10 20 50 100
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the VPN Gateway belongs. To query the region ID, call DescribeRegions.
VpcId	String	Yes	vpc-bp1ub1yt9c vakoelj1y9c	The ID of the VPC to which the VPN Gateway belongs.

Parameter	Type	Required?	Example value	Description
Autopay	Boolean	No	false	Indicates whether the bill is paid automatically. Valid values: true false (default)
EnableIpsec	Boolean	No	true	Indicates whether to enable the IPsec-VPN function. The IPsec-VPN function provides a site-to-site connection. You can create an IPsec tunnel to connect an on-premises data center to a VPC, or to connect two VPCs. Valid values: true (default) false
EnableSsl	Boolean	No	true	Indicates whether to enable the SSL-VPN function. If this function is enabled, point-to-site VPN connection is provided and customer gateway configuration is not needed. Valid values: true false (default)

Parameter	Type	Required ?	Example value	Description
InstanceChargeType	String	No	PREPAY	The billing method of the VPN Gateway. Valid values: • Postpay : Pay-As-You-Go billing based on the traffic.
Name	String	No	MYVPN	The name of the VPN Gateway . The default value is the ID of the VPN Gateway. The name must be 2 to 100 characters in length and contain letters, numbers, periods (.), underscores (_), and hyphens (-). The name must start with a letter. It cannot start with <code>http ://</code> or <code>https ://</code> .
Period	Integer	No	1	The validity period of a subscription. Valid values: 1 - 9 12 24 36
SslConnections	Integer	No	2	The maximum number of clients allowed to connect simultaneously.

Response parameters

Parameter	Type	Example value	Description
Name	String	myVpn	The name of the VPN Gateway.
OrderId	String	202249400220415	The ID of the order. Go to the console to complete the payment.

Parameter	Type	Example value	Description
RequestId	String	54B48E3D-DF70-471B-AA93-08E683A1B457	The ID of the request.
VpnGatewayId	String	vpn-bp1q8bgx4xnkm2ogj0fiu	The ID of the VPN Gateway.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=CreateVpnGateway
&Bandwidth=5
&RegionId=cn-hangzhou
&VpcId=vpc-bp1ub1yt9c-vakoelj1y9-c
&Name=MYVPN
&InstanceChargeType=PREPAY
&Period=1
&AutoPay=false
&EnableIpAddress=true
&EnableSsl=true
&SslConnections=2
&<CommonParameters>
```

Response example

- XML format

```
<CreateVpnGatewayResponse>
  <Name>myVpn</Name>
  <VpnGatewayId>vpn-bp1q8bgx4xnkm2ogj0fiu</VpnGatewayId>
  <RequestId>54B48E3D-DF70-471B-AA93-08E683A1B457</RequestId>
</CreateVpnGatewayResponse>
```

- JSON format

```
{
  "CreateVpnGatewayResponse": {
    "Name": "myVpn",
    "VpnGatewayId": "vpn-bp1q8bgx4xnkm2ogj0fiu",
    "RequestId": "54B48E3D-DF70-471B-AA93-08E683A1B457"
  }
}
```

```
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	Resource.QuotaFull	The quota of resource is full	The resource quota has been reached.

[See common error codes](#)

13.2 DescribeVpnGateways

Queries VPN Gateways.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeVpnGateways	The name of this action. Value: DescribeVpnGateways
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the VPN Gateway belongs. To query the region ID, call DescribeRegions.
BusinessStatus	String	No	Normal	The status of the VPN Gateway. Valid values: Normal FinancialLocked
PageNumber	Integer	No	1	The number of pages to return. Default value: 1.

Parameter	Type	Required ?	Example value	Description
PageSize	Integer	No	10	The number of rows per page. Maximum value: 50 . Default value: 10 .
Status	String	No	init	The status of the VPN Gateway. Valid values: • init • provisioning • active • updating • deleting
VpcId	String	No	vpc-bp1ub1yt9c vakoelj1y9c	The ID of the VPC to which the VPN gateway belongs.
VpnGatewayId	String	No	vpn-bp1q8bgx4x nkm2ogj0fiu	The ID of the VPN Gateway.

Response parameters

Parameter	Type	Example value	Description
VpnGateways	N/A	N//A	A list of VPN Gateways.
└ VpnGatewayId	String	vpn-bp1q8bgx4x nkm2ogj0fiu	The ID of the VPN Gateway.
└ VpcId	String	vpc-bp1ub1yt9c vakoelj1y9c	The ID of the VPC to which the VPN Gateway belongs.
└ VSwitchId	String	vsw-bp1y9ovl1c u9ou4tvma0l	The ID of the VSwitch to which the VPN Gateway belongs.
└ InternetIp	String	116.62.69.xxx	The public IP address of the VPN Gateway.

Parameter	Type	Example value	Description
⌞CreateTime	Long	1515383700000	The time at which the VPN Gateway was created.
⌞EndTime	Long	1518105600000	The time at which the VPN Gateway is to expire.
⌞Spec	String	5M	The peak bandwidth of the VPN Gateway.
⌞Name	String	test	The name of the VPN Gateway.
⌞Description	String	test	The description of the VPN Gateway.
⌞Status	String	active	The status of the VPN Gateway.
⌞BusinessStatus	String	Normal	The business status of the VPN Gateway.
⌞ChargeType	String	Prepay	The billing type.
⌞IpsecVpn	String	enable	Indicates whether the IPsec-VPN function is enabled.
⌞SslMaxConnections	Long	5	The maximum number of SSL-VPN clients allowed to connect.
⌞SslVpn	String	enable	Indicates whether the SSL-VPN function is enabled.
TotalCount	Integer	1	The number of queries entries.
PageNumber	Integer	1	The current page number.
PageSize	Integer	10	The number of entries per page.

Parameter	Type	Example value	Description
RequestId	String	DF11D6F6-E35A-41C3-9B20-6FC8A901FE65	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DescribeVpnGateways
&RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

- XML format

```
<DescribeVpnGatewaysResponse>
  <PageNumber>1</PageNumber>
  <TotalCount>1</TotalCount>
  <PageSize>10</PageSize>
  <VpnGateways>
    <VpnGateway>
      <Status>active</Status>
      <VpnGatewayId>vpn-bp1q8bgx4x-nkm2ogj0fi-u</VpnGatewayId>
      <BusinessStatus>Normal</BusinessStatus>
      <Spec>5M</Spec>
      <CreateTime>1492753580000</CreateTime>
      <InternetIp>116.62.69.xxx</InternetIp>
      <EndTime>1495382400000</EndTime>
      <VSwitchId>vsw-bp1y9ovl1c-u9ou4tvma0-l</VSwitchId>
      <VpcId>vpc-bp1ublyt9c-vakoelj1y9-c</VpcId>
    </VpnGateway>
  </VpnGateways>
  <RequestId>DF11D6F6-E35A-41C3-9B20-6FC8A901FE65</RequestId>
</DescribeVpnGatewaysResponse>
```

- JSON format

```
{
  "PageNumber": 1,
  "TotalCount": 1,
  "PageSize": 10,
  "VpnGateways": {
    "VpnGateway": [
      {
        "Status": "active",
        "VpnGatewayId": "vpn-bp1q8bgx4x-nkm2ogj0fi-u",
        "Spec": "5M",
        "BusinessStatus": "Normal",
        "CreateTime": 1492753580000,
        "InternetIp": "116.62.69.xxx",
        "EndTime": 1495382400000,
        "VSwitchId": "vsw-bp1y9ovl1c-u9ou4tvma0-l",

```

```
    " VpcId ":" vpc - bp1ub1yt9c vakoelj1y9 c "
  }
],
},
" RequestId ":" B2CD1315 - CA2B - 47B1 - 9DA5 - 8F1D69C48E 82 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbbiden. SubUser	User not authorized to operate on the specified resource as your account is created by another user.	You are not authorized to operate on this resource . Please apply for the permission and try again.
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource . For more information, open a ticket.

[See common error codes](#)

13.3 DescribeVpnGateway

Queries the detailed information of a VPN Gateway.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeVpnGateway	The name of this action. Value: DescribeVpnGateways

Parameter	Type	Required ?	Example value	Description
RegionId	String	Yes	cn-shanghai	The ID of the region to which the VPN Gateway belongs. To query the region ID, call DescribeRegions.
VpnGatewayId	String	Yes	vpn-bp1q8bgx4xnkm2ogj0fiu	The ID of the VPC to which the VPN Gateway belongs.

Response parameters

Parameter	Type	Example value	Description
VpnGatewayId	String	vpn-bp1q8bgx4xnkm2ogj0fiu	The ID of the VPN Gateway.
VpcId	String	vpc-23rsxdfxxx xxxxxxxxxxxx	The ID of the VPC to which the VPN Gateway belongs.
VSwitchId	String	vsw-bp1y9ovl1cu9ou4tvma0l	The ID of the VSwitch to which the VPN Gateway belongs.
InternetIp	String	116.62.222.28	The public IP address.
CreateTime	Long	1495382400000	The time at which the VPN Gateway was created.
EndTime	Long	1495382400000	The time at which the VPN Gateway is to expire.
Spec	String	5	The specification of the VPN Gateway.
Name	String	vpngatewayname	The name of the VPN Gateway.
Description	String	vpngatewaydescription	The description of the VPN Gateway.

Parameter	Type	Example value	Description
Status	String	init	The status of the VPN Gateway.
BusinessStatus	String	Normal	The business status of the VPN Gateway.
ChargeType	String	PayByTraffic	The payment type.
IpsecVpn	String	enable	Indicates whether the IPsec-VPN function is enabled.
RequestId	String	DE77A7F3-3B74-41C0-A5BC-CAFD188C28B6	The ID of the request.
SslMaxConnections	Long	5	The maximum number of concurrent SSL-VPN connections.
SslVpn	String	enable	Indicates whether the SSL-VPN function is enabled.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DescribeVpnGateway
&RegionId=cn-shanghai
&VpnGatewayId=vpn-bp1q8bgx4xnkm2ogj0fiu
&<CommonParameters>
```

Response example

• XML format

```
<DescribeVpnGatewayResponse>
  <Status>active</Status>
  <VpnGatewayId>vpn-bp1q8bgx4xnkm2ogj0fiu</VpnGatewayId>
  <Spec>5M</Spec>
  <BusinessStatus>Normal</BusinessStatus>
  <RequestId>98C99F30-A3D2-42E1-AC75-0C882FBE92F7</RequestId>
  <CreateTime>1492753580000</CreateTime>
  <InternetIp>116.62.69.64</InternetIp>
  <EndTime>1495382400000</EndTime>
  <VSwitchId>vsw-bp1y9ovllcu9ou4tvma0l</VSwitchId>
  <VpcId>vpc-bp1ublyt9cvakoeljly9c</VpcId>
```

```
</ DescribeVpnGatewayResponse >
```

- JSON format

```
{
  "Status": "active",
  "VpnGatewayId": "vpn-bp1q8bgx4x-nkm2ogj0fi-u",
  "Spec": "5M",
  "BusinessStatus": "Normal",
  "RequestId": "E98A9651-7098-40C7-8F85-C818D1EBBA85",
  "CreateTime": 1492753580000,
  "InternetIp": "116.62.69.64",
  "EndTime": 1495382400000,
  "VSwitchId": "vsw-bp1y9ovl1c-u9ou4tvma0-l",
  "VpcId": "vpc-bp1ub1yt9c-vakoelj1y9-c"
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbidden.SubUser	User not authorized to operate on the specified resource as your account is created by another user.	You are not authorized to operate on this resource. Please apply for the permission and try again.
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource. For more information, open a ticket.
404	InvalidVpnGatewayInstanceId.NotFound	The specified vpn gateway instance id does not exist.	The specified VPN connection does not exist. Check if the VPN link is correct.

[See common error codes](#)

13.4 DeleteVpnGateway

Deletes a VPN Gateway.



Note:

You cannot delete a VPN Gateway associated with an IPsec connection.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteVpnGateway	The name of this action. Value: DeleteVpnGateway
RegionId	String	Yes	cn-hangzhou	The ID of the region to which VPN Gateway belongs. To query the region ID, call DescribeRegions.
VpnGatewayId	String	Yes	vpn-bp1q8bgx4xnkm2ogj0fiu	The ID of the VPN Gateway.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	>0ED8D006-F706-4D23-88ED-E11ED28DCAC0	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DeleteVpnGateway
&RegionId=cn-hangzhou
&VpnGatewayId=vpn-bp1q8bgx4xnkm2ogj0fiu
&<CommonParameters>
```

Response example

- XML format

```
<DeleteNatGatewayResponse>
  <RequestId>0ED8D006-F706-4D23-88ED-E11ED28DCA-C0</
  RequestId>
</DeleteNatGatewayResponse>
```

- JSON format

```
{
  "RequestId": "0ED8D006-F706-4D23-88ED-E11ED28DCA-C0"
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbidden.SubUser	User not authorized to operate on the specified resource as your account is created by another user.	You are not authorized to operate on this resource.
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource. For more information, open a ticket.
404	InvalidVpnGatewayInstanceId.NotFound	The specified vpn gateway instance id does not exist.	The specified VPN Gateway does not exist.
403	ForbiddenRelease	Forbidden to release a prepaid instance within validity period	You cannot release a Subscription instance before the expiration date.

HTTP status code	Error code	Error message	Description
400	VpnGateway.Configuring	The specified service is configuring.	The specified service is being configured. Please try again later.

[See common error codes](#)

13.5 CreateCustomerGateway

Creates a customer gateway.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreateCustomerGateway	The name of this action. Value: CreateCustomerGateway
IpAddress	String	Yes	116.62.222.xxx	The IP address of the customer gateway.
RegionId	String	Yes	cn-shanghai	The ID of the region to which the customer gateway belongs. To query the region ID, callDescribeRegions.

Parameter	Type	Required ?	Example value	Description
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.
Description	String	No	customer gateway	The description of the customer gateway. The description must be 2 to 256 characters in length. It must start with an English letter. It cannot start with <code>http://</code> or <code>https://</code>.
Name	String	No	Gateway	The name of the customer gateway. 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. It cannot start with <code>http://</code> or <code>https://</code>.

Response parameters

Parameter	Type	Example value	Description
CustomerGatewayId	String	cgw-bp1aw0a5nff03xp1pcqc	The ID of the customer gateway.

Parameter	Type	Example value	Description
IpAddress	String	100.1.1.2	The IP address of the customer gateway.
Name	String	test	The name of the customer gateway.
Description	String	test	The description of the customer gateway.
CreateTime	Long	1493363486000	The time at which the customer gateway was created.
RequestId	String	cgw-bp1aw0a5nff03xp1pcqc	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=CreateCustomerGateway
&IpAddress=116.62.222.xxx
&RegionId=cn-shanghai
&<CommonParameters>
```

Response example

- XML format

```
<CreateCustomerGatewayResponse>
  <CustomerGatewayId>cgw-bp1aw0a5nff03xp1pcqc</CustomerGatewayId>
  <RequestId>185E81B1-3916-4667-B48F-C52409B33F2B</RequestId>
  <CreateTime>1493363486000</CreateTime>
  <IpAddress>100.1.1.2</IpAddress>
</CreateCustomerGatewayResponse>
```

- JSON format

```
{
  "CustomerGatewayId": "cgw-bp1jrawp82-av6bws9h2ut",
  "RequestId": "D32B3C26-6C6C-4988-93E9-D2A6444CE6AE",
  "CreateTime": 1493363599000,
  "IpAddress": "100.1.1.2"
```

```
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbbiden. SubUser	User not authorized to operate on the specified resource as your account is created by another user.	You are not authorized to operate on this resource . Please apply for the permission and try again.
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource . For more information, open a ticket.
400	InvalidIpAddress .AlreadyExist	Specified IpAddress is already exist.	The specified IP address already exists.
400	InvalidIpAddress .WrongFormat	Specified IpAddress is invalid.	The IP address is invalid.
400	InvalidName	The name is not valid	The name format is invalid.
400	InvalidDes cription	The description is not valid	The description format is invalid.
400	Resource. QuotaFull	The quota of resource is full	The resource quota has been reached.

[See common error codes](#)

13.6 DescribeCustomerGateways

Queries customer gateways.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeCustomerGateways	The name of this action. Value: DescribeCustomerGateways
RegionId	String	Yes	cn-shanghai	The ID of the region to which the customer gateway belongs. To query the region ID, call DescribeRegions.
CustomerGatewayId	String	No	vpn-bp1q8bgx4xnkm2ogj0fiu	The ID of the customer gateway.
PageNumber	Integer	No	1	The number of pages to return. Default value: 1.
PageSize	Integer	No	10	The number of rows per page. Maximum value: 50. Default value: 10.

Response parameters

Parameter	Type	Example value	Description
CustomerGateways	N/A	N/A	A list of customer gateways.
└ CustomerGatewayId	String	cgw-bp1pvpl9r9adju6l5nxck	The ID of the customer gateway.
└ Name	String	test	The name of the customer gateway.
└ Description	String	test	The description of the customer gateway.

Parameter	Type	Example value	Description
[⌞] IpAddress	String	139.196.32.xxx	The IP address of the customer gateway.
[⌞] CreateTime	Long	1492747187000	The time at which the customer gateway was created.
TotalCount	Integer	1	The number of queried entries.
PageNumber	Integer	1	The current page number.
PageSize	Integer	10	The number of entries per page.
RequestId	String	5BE01CD7-5A50-472D-AC14-CA181C5C03BE	The ID of the request.

Examples

Request example

```
https :// vpc . aliyuncs . com /? Action = DescribeCustomerGateways
& RegionId = cn - shanghai
&< CommonParameters >
```

Response example

• XML format

```
< DescribeCustomerGatewaysResponse >
  < PageNumber > 1 </ PageNumber >
  < TotalCount > 1 </ TotalCount >
  < PageSize > 10 </ PageSize >
  < RequestId > 5BE01CD7 - 5A50 - 472D - AC14 - CA181C5C03 BE </
RequestId >
  < CustomerGateways >
    < CustomerGateway >
      < Name > test </ Name >
      < CustomerGatewayId > cgw - bp1pvpl9r9 adju6l5nxc k </
CustomerGatewayId >
      < CreateTime > 1492747187 000 </ CreateTime >
      < IpAddress > 139 . 196 . 32 . xxx </ IpAddress >
    </ CustomerGateway >
  </ CustomerGateways >
</ DescribeCustomerGatewaysResponse >
```

• JSON format

```
{
```

```

" PageNumber ": 1 ,
" TotalCount ": 1 ,
" PageSize ": 10 ,
" RequestId ":" E82612A9 - CB90 - 4D7E - B394 - 1DB7F6509B 29 ",
" CustomerGa teways ":{
  " CustomerGa teway ":[
    {
      " CustomerGa tewayId ":" cgw - bp1pvpl9r9 adju6l5nxc k ",
      " Name ":" test ",
      " CreateTime ": 1492747187 000 ,
      " IpAddress ":" 139 . 196 . 32 . xxx "
    }
  ]
}
}
}

```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbbiden. SubUser	User not authorized to operate on the specified resource as your account is created by another user.	You are not authorized to operate on this resource . Please apply for the permission and try again.
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource . For more information, open a ticket.

[See common error codes](#)

13.7 DescribeCustomerGateway

Queries the detailed information of a customer gateway.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeCustomerGateway	The name of this action. Value: DescribeCustomerGateway
CustomerGatewayId	String	Yes	vpn-bp1q8bgx4xnkm2ogj0fiu	The ID of the customer gateway.
RegionId	String	Yes	cn-shanghai	The ID of the region to which the customer gateway belongs. To query the region ID, call DescribeRegions.

Response parameters

Parameter	Type	Example value	Description
CustomerGatewayId	String	cgw-bp1pvpl9r9adju6l5nxck	The ID of the customer gateway.
Name	String	test	The name of the customer gateway.
Description	String	test	The description of the customer gateway.
IpAddress	String	139.196.32.xxx	The IP address of the customer gateway.
RequestId	String	99506ECB-218F-45A5-AE8E-79518451F615	The ID of the request.
CreateTime	Long	1492747187000	The time at which the customer gateway was created.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DescribeCustomerGateway
&CustomerGatewayId=vpn-bp1q8bgx4xnkm2ogj0fiu
&RegionId=cn-shanghai
&<CommonParameters>
```

Response example

- XML format

```
<DescribeCustomerGatewayResponse>
  <Name>test</Name>
  <CustomerGatewayId>cgw-bp1pvpl9r9adju6l5nxcnk</CustomerGatewayId>
  <CreateTime>1492747187000</CreateTime>
  <RequestId>99506ECB-218F-45A5-AE8E-79518451F615</RequestId>
  <IpAddress>139.196.32.xxx</IpAddress>
</DescribeCustomerGatewayResponse>
```

- JSON format

```
{
  "Name": "test",
  "CustomerGatewayId": "cgw-bp1pvpl9r9adju6l5nxcnk",
  "CreateTime": 1492747187000,
  "RequestId": "A0457BC9-6C0F-4437-AB9D-FB2EABC1D6A2",
  "IpAddress": "139.196.32.xxx"
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbidden.SubUser	User not authorized to operate on the specified resource as your account is created by another user.	You are not authorized to operate on this resource. Please apply for the permission and try again later.
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource. For more information, open a ticket.

HTTP status code	Error code	Error message	Description
404	InvalidCustomerGatewayInstanceId.NotFound	The specified customer gateway instance id does not exist.	The specified instance does not exist.

[See common error codes](#)

13.8 DeleteCustomerGateway

Deletes a customer gateway.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteCustomerGateway	The name of this action. Value: DeleteCustomerGateway
CustomerGatewayId	String	Yes	vpn-bp1q8bgx4xnkm2ogj0fiu	The ID of the customer gateway.
RegionId	String	Yes	cn-shanghai	The ID of the region to which the customer gateway belongs. To query the region ID, call DescribeRegions.

Parameter	Type	Required?	Example value	Description
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	606998F0-B94D-48FE-8316-ACA81BB230DA	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DeleteCustomerGateway
&CustomerGatewayId=vpn-bp1q8bgx4xnkm2ogj0fiu
&RegionId=cn-shanghai
&<CommonParameters>
```

Response example

- XML format

```
<DeleteCustomerGatewayResponse>
  <RequestId>606998F0-B94D-48FE-8316-ACA81BB230DA</RequestId>
</DeleteCustomerGatewayResponse>
```

- JSON format

```
{
  "RequestId": "606998F0-B94D-48FE-8316-ACA81BB230DA"
}
```

```
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbbiden. SubUser	User not authorized to operate on the specified resource as your account is created by another user.	You are not authorized to operate on this resource . Please apply for the permission and try again later.
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource . For more information, open a ticket.
404	InvalidCustomerGatewayInstanceId.NotFound	The specified customer gateway instance id does not exist.	The specified instance does not exist.

[See common error codes](#)

13.9 ModifyCustomerGatewayAttribute

Modifies the name and description of a customer gateway.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ModifyCustomerGatewayAttribute	The name of this action. Value: ModifyCustomerGatewayAttribute

Parameter	Type	Required?	Example value	Description
CustomerGatewayId	String	Yes	vpn-bp1q8bgx4xnkm2ogj0fiu	The ID of the region to which the customer gateway belongs.
RegionId	String	Yes	cn-shanghai	The region to which the customer gateway belongs. To query the region ID, call DescribeRegions.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.
Description	String	No	test	The description of the customer gateway. The description can must be 2 to 256 characters in length. It must start with an English letter, but cannot start with <code>http ://</code> or <code>https ://</code> .

Parameter	Type	Required ?	Example value	Description
Name	String	No	test	The name of the customer gateway. The name must be 2 and 128 characters in length and can contain letters, numbers, periods (.), underscores (_), and hyphens (-). The name must start with a letter. It cannot start with <code>http ://</code> or <code>https ://</code>.

Response parameters

Parameter	Type	Example value	Description
CustomerGatewayId	String	cgw-bp1pvpl9r9adju6l5nxck	The ID of the customer gateway.
Name	String	test	The name of the customer gateway.
Description	String	test	The description of the customer gateway.
IpAddress	String	139.196.32.167	The IP address of the customer gateway.
CreateTime	Long	1492747187000	The time at which the customer gateway was created.
RequestId	String	E61293C8-AF07-4E87-A272-542680038F93	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=ModifyCustomerGatewayAttribute
&CustomerGatewayId=vpn-bp1q8bgx4xnkm2ogj0fiu
&RegionId=cn-shanghai
&Name=test
&<CommonParameters>
```

Response example

• XML format

```
<ModifyCustomerGatewayAttributeResponse>
  <CustomerGatewayId>cgw-bp1pvpl9r9adju6l5nxc-k</CustomerGatewayId>
  <RequestId>E61293C8-AF07-4E87-A272-542680038F93</RequestId>
  <CreateTime>1492747187000</CreateTime>
  <IpAddress>139.196.32.167</IpAddress>
</ModifyCustomerGatewayAttributeResponse>
```

• JSON format

```
{
  "CustomerGatewayId": "cgw-bp1pvpl9r9adju6l5nxc-k",
  "CreateTime": 1492747187000,
  "RequestId": "8AA5CE21-2E6A-4530-BDF5-F055849476E6",
  "IpAddress": "139.196.32.167"
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbidden.SubUser	User not authorized to operate on the specified resource as your account is created by another user.	You are not authorized to operate on this resource. Please apply for the permission and try again.
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource. For more information, open a ticket.
404	InvalidCustomerGatewayInstanceId.NotFound	The specified customer gateway instance id does not exist.	The specified instance does not exist.
400	InvalidName	The name is not valid	The name format is invalid.

HTTP status code	Error code	Error message	Description
400	InvalidDescription	The description is not valid	The description format is invalid.

[See common error codes](#)

13.10 DescribeVpnConnection

Queries the detailed information of an IPsec connection.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeVpnConnection	The name of this action. Value: DescribeVpnConnection
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the IPsec connection belongs. To query the region ID, call DescribeRegions.
VpnConnectionId	String	Yes	vco-bp1bbi27hojx80nck9k1i	The ID of the IPsec connection.

Response parameters

Parameter	Type	Example value	Description
VpnConnectionId	String	vco-bp1bbi27hojx80nck9k1i	The ID of the IPsec connection.

Parameter	Type	Example value	Description
CustomerGatewayId	String	cgw-bp1mvj4g9kogwwcxknfuv	The ID of the customer gateway.
VpnGatewayId	String	vpn-bp1q8bgx4xnkm2ogj0fiu	The ID of the VPN Gateway.
Name	String	ipsec1	The name of the IPsec connection.
LocalSubnet	String	1.1.1.0/24,1.1.2.0/24	The CIDR block of the VPC.
RemoteSubnet	String	1.1.1.0/24,1.1.2.0/24	The CIDR block of the on-premises data center.
CreateTime	Long	1492753817000	The time when the IPsec connection was created.
Status	String	ike_sa_not_established	The connection status. Valid values: - ike_sa_not_established: The phase one negotiation failed. - ike_sa_established: The phase one negotiation succeeded. - ipsec_sa_not_established: The phase two negotiation failed. - ipsec_sa_established: The phase two negotiation succeeded.
EffectImmediately	Boolean	true	Indicates whether the IPsec connection takes effect immediately. - true: Reconnection is triggered when there is a change to the network configuration. - false: Reconnection is triggered when traffic is detected over the network. Reconnection may cause intermittent disconnection.
IkeConfig	N/A	N/A	Configurations of phase one negotiation.

Parameter	Type	Example value	Description
<code>⌞IkeAuthAlg</code>	String	sha1	The IKE authentication algorithm. Both SHA-1 and MD5 are supported .
<code>⌞IkeEncAlg</code>	String	aes	The IKE encryption algorithm.
<code>⌞IkeLifetime</code>	Long	86400	The IKE life time.
<code>⌞IkeMode</code>	String	main	The IKE mode. Both the main mode and aggressive mode are supported . The main mode features high security. If NAT traversal is enabled , we recommend that you select the aggressive mode.
<code>⌞IkePfs</code>	String	group2	The DH group.
<code>⌞IkeVersion</code>	String	ikev1	The IKE version.
<code>⌞LocalId</code>	String	116.62.69.64	The local ID. It is the IP address of the VPN Gateway by default. Both FQDN and IP formats are supported .
<code>⌞Psk</code>	String	pgw6dy7d1i8in7x5	The pre-shared key.
<code>⌞RemoteId</code>	String	139.196.32.167	The peer ID. It is the IP address of the customer gateway by default . Both FQDN and IP formats are supported.
<code>IpssecConfig</code>	N/A	N/A	Configurations of phase two negotiation.

Parameter	Type	Example value	Description
<code>IpsecAuthAlg</code>	String	sha1	The IPsec authentication algorithm. Both SHA-1 and MD5 are supported.
<code>IpsecEncAlg</code>	String	aes	The IPsec encryption algorithm.
<code>IpsecLifetime</code>	Long	86400	The IPsec lifetime.
<code>IpsecPfs</code>	String	group2	The DH group.
<code>RequestId</code>	String	F2310D45-BCF6-4E2E-9082-B4503844BA4C	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DescribeVpnConnections
&RegionId=cn-hangzhou
&VpnConnectionId=vco-bp1bbi27hojx80nck9k1i
&<CommonParameters>
```

Response example

• XML format

```
<DescribeVpnConnectionsResponse>
  <PageNumber>1</PageNumber>
  <VpnConnections>
    <VpnConnection>
      <Name>c2</Name>
      <CustomerGatewayId>cgw-bp1wl8dtz3auwlvwhgcw</CustomerGatewayId>
      <Status>ike_sa_not_established</Status>
      <RemoteSubnet>192.168.0.0/16</RemoteSubnet>
      <IpsecConfig>
        <IpsecLifetime>86400</IpsecLifetime>
        <IpsecAuthAlg>md5</IpsecAuthAlg>
        <IpsecPfs>group2</IpsecPfs>
        <IpsecEncAlg>aes</IpsecEncAlg>
      </IpsecConfig>
      <EffectImmediately>>false</EffectImmediately>
      <VpnGatewayId>vpn-bp1yfrjxn4d5t63tbqq70</VpnGatewayId>
      <CreateTime>1519391420000</CreateTime>
      <VpnConnectionId>vco-bp1w3mlp23iftycvseuc2</VpnConnectionId>
      <LocalSubnet>172.16.0.0/12</LocalSubnet>
    </VpnConnection>
  </VpnConnections>
</DescribeVpnConnectionsResponse>
```

```

    < IkeConfig >
      < IkeEncAlg > aes </ IkeEncAlg >
      < RemoteId > 47 . 97 . 176 . 95 </ RemoteId >
      < IkePfs > group2 </ IkePfs >
      < IkeAuthAlg > sha1 </ IkeAuthAlg >
      < Psk > 1234567 </ Psk >
      < IkeMode > aggressive </ IkeMode >
      < IkeLifetime > 86400 </ IkeLifetime >
      < IkeVersion > ikev1 </ IkeVersion >
      < LocalId > 116 . 62 . 119 . 2 </ LocalId >
    </ IkeConfig >
  </ VpnConnection >
</ VpnConnections >
< TotalCount > 1 </ TotalCount >
< PageSize > 10 </ PageSize >
< RequestId > 7D598A10 - 26EF - 44F2 - 9F47 - E417842F3C EA </
RequestId >
</ DescribeVpnConnectionsResponse >

```

• JSON format

```

{
  " PageNumber ": 1 ,
  " VpnConnections ": {
    " VpnConnection ": [
      {
        " CustomerGatewayId ": " cgw - bp1wl8dtz3 auwlvwhgc w ",
        " Name ": " c2 ",
        " Status ": " ike_sa_not _establish ed ",
        " RemoteSubnet ": " 192 . 168 . 0 . 0 / 16 ",
        " IpsecConfig ": {
          " IpsecLifetime ": 86400 ,
          " IpsecAuthAlg ": " md5 ",
          " IpsecPfs ": " group2 ",
          " IpsecEncAlg ": " aes "
        },
        " VpnGatewayId ": " vpn - bp1yfrjxn4 d5t63tbqq7 0 ",
        " EffectImmediately ": false ,
        " VpnConnectionId ": " vco - bp1w3m1p23 iftycvseuc 2 ",
        " CreateTime ": 1519391420 000 ,
        " LocalSubnet ": " 172 . 16 . 0 . 0 / 12 ",
        " IkeConfig ": {
          " IkeEncAlg ": " aes ",
          " IkePfs ": " group2 ",
          " RemoteId ": " 47 . 97 . 176 . 95 ",
          " IkeAuthAlg ": " sha1 ",
          " Psk ": " 1234567 ",
          " IkeMode ": " aggressive ",
          " IkeLifetime ": 86400 ,
          " IkeVersion ": " ikev1 ",
          " LocalId ": " 116 . 62 . 119 . 2 "
        }
      }
    ]
  },
  " TotalCount ": 1 ,
  " PageSize ": 10 ,
  " RequestId ": " 7D598A10 - 26EF - 44F2 - 9F47 - E417842F3C EA "
}

```

```
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbbiden. SubUser	User not authorized to operate on the specified resource as your account is created by another user.	You are not authorized to operate on this resource . Please apply for the permission and try again later.
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource . For more information, open a ticket.
404	InvalidVpn Connection InstanceId. NotFound	The specified vpn connection instance id does not exist.	The specified VPN connection does not exist . Check if the VPN link is correct.

[See common error codes](#)

13.11 DeleteVpnConnection

Deletes an IPsec connection.



Note:

After an IPsec connection is deleted, the VPC is disconnected from the network of the on-premises data center.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteVpnConnection	The name of this action. Value: DeleteVpnConnection
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the IPsec connection belongs. To query the region ID, call DescribeRegions.
VpnConnectionId	String	Yes	vco-bp1bbi27hojx80nck9kli	The ID of the IPsec connection.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	606998F0-B94D-48FE-8316-ACA81BB230DA	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DeleteVpnConnection
&RegionId=cn-hangzhou
&VpnConnectionId=vco-bp1bbi27hojx80nck9kli
```

&< CommonParameters >

Response example

• XML format

```
< DeleteVpnConnectionResponse >
  < RequestId > 606998F0 - B94D - 48FE - 8316 - ACA81BB230 DA </
    RequestId >
</ DeleteVpnConnectionResponse >
```

• JSON format

```
{
  "RequestId ":" 606998F0 - B94D - 48FE - 8316 - ACA81BB230 DA "
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbidden.SubUser	User not authorized to operate on the specified resource as your account is created by another user.	You are not authorized to operate on this resource . Please apply for the permission and try again.
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource . For more information, open a ticket.
404	InvalidVpnConnectionInstanceId.NotFound	The specified vpn connection instance id does not exist.	The specified VPN connection does not exist . Check that the VPN connection exists.
400	VpnGateway.Configuring	The specified service is configuring.	The service is being configured. Please try again later.

[See common error codes](#)

13.12 DownloadVpnConnectionConfig

Obtains the configurations of an IPsec connection.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DownloadVpnConnectionConfig	The name of this action. Value: DownloadVpnConnectionConfig
RegionId	String	Yes	cn-shanghai	The ID of the region to which the IPsec connection belongs. To query the region ID, call DescribeRegions.
VpnConnectionId	Integer	Yes	vco-bp1bbi27hojx80nck9k1i	The ID of the IPsec connection.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	0C68048B-0F70-40DA-B8AE-1B79B5CF62E3	The ID of the request.
VpnConnectionConfig			IPsec connection configurations.
└─IkeConfig			IKE configurations.
└─IkeAuthAlg	String	sha1	The IKE authentication algorithm. Both SHA-1 and MD5 are supported.

Parameter	Type	Example value	Description
<code>└IkeEncAlg</code>	String	aes	The IKE encryption algorithm.
<code>└IkeLifetime</code>	Long	86400	The IKE lifetime.
<code>└IkeMode</code>	String	main	The IKE mode. Both main mode and aggressive mode are supported. The main mode features high security. If NAT traversal is enabled , we recommend that you select the aggressive mode.
<code>└IkePfs</code>	String	group2	The DH group.
<code>└IkeVersion</code>	String	ikev1	The IKE version.
<code>└LocalId</code>	String	116.62.69.64	The local ID. By default, it is the IP address of the VPN Gateway. Both FQDN and IP formats are supported .
<code>└Psk</code>	String	pgw6dy7dli8in7x5	The pre-shared key.
<code>└RemoteId</code>	String	139.196.32.167	The peer ID. By default, it is the IP address of the customer gateway . Both FQDN and IP formats are supported.
<code>└IpsecConfig</code>			The IPsec connection configurations.
<code>└IpsecAuthAlg</code>	String	sha1	The IPsec authentication algorithm . Both SHA-1 and MD5 are supported.
<code>└IpsecEncAlg</code>	String	aes	The IPsec encryption algorithm.

Parameter	Type	Example value	Description
<code>└─IpsecLifetime</code>	Long	86400	The IPsec lifetime.
<code>└─IpsecPfs</code>	String	group2	The DH group.
<code>└─Local</code>	String	139.196.32.167	The IP address of the VPN Gateway.
<code>└─LocalSubnet</code>	String	1.1.1.0/24,1.1.2.0/24	The CIDR block of the VPC.
<code>└─Remote</code>	String	116.62.69.64	The IP address of the customer gateway.
<code>└─RemoteSubnet</code>	String	1.1.1.0/24,1.1.2.0/24	The CIDR block of the on-premises data center.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DownloadVpnConnectionConfig
&RegionId=cn-shanghai
&VpnConnectionId=vco-bp1bbi27hojx80nck9k1i
&<CommonParameters>
```

Response example

• XML format

```
<DownloadVpnConnectionConfigResponse>
  <RequestId>6F4A035F-7060-45D7-B9BD-719372782AF6</RequestId>
  <VpnConnectionConfig>
    <RemoteSubnet>1.1.1.0/24,1.1.2.0/24</RemoteSubnet>
    <Local>139.196.32.167</Local>
    <IpsecConfig>
      <IpsecLifetime>86400</IpsecLifetime>
      <IpsecAuthAlg>sha1</IpsecAuthAlg>
      <IpsecPfs>group2</IpsecPfs>
      <IpsecEncAlg>aes</IpsecEncAlg>
    </IpsecConfig>
    <Remote>116.62.69.64</Remote>
    <LocalSubnet>2.2.2.0/24</LocalSubnet>
    <IkeConfig>
      <IkeEncAlg>aes</IkeEncAlg>
      <IkePfs>group2</IkePfs>
      <RemoteId>116.62.69.64</RemoteId>
      <IkeAuthAlg>sha1</IkeAuthAlg>
```

```

    < Psk > pgw6dy7d1i 8in7x5 </ Psk >
    < IkeMode > main </ IkeMode >
    < IkeLifetim e > 86400 </ IkeLifetim e >
    < IkeVersion > ikev1 </ IkeVersion >
    < LocalId > 139 . 196 . 32 . 167 </ LocalId >
  </ IkeConfig >
</ VpnConnect ionConfig >
</ DownloadVp nConnectio nConfigRes ponse >

```

• JSON format

```

{
  "RequestId ":" 0C68048B - 0F70 - 40DA - B8AE - 1B79B5CF62 E3 ",
  "VpnConnect ionConfig ":{
    "RemoteSubn et ":" 1 . 1 . 1 . 0 / 24 , 1 . 1 . 2 . 0 / 24 ",
    "IpsecConfi g ":{
      "IpsecLifet ime ": 86400 ,
      "IpsecAuthA lg ":" sha1 ",
      "IpsecPfs ":" group2 ",
      "IpsecEncAl g ":" aes "
    },
    "Local ":" 139 . 196 . 32 . 167 ",
    "Remote ":" 116 . 62 . 69 . 64 ",
    "LocalSubne t ":" 2 . 2 . 2 . 0 / 24 ",
    "IkeConfig ":{
      "IkeEncAlg ":" aes ",
      "RemoteId ":" 116 . 62 . 69 . 64 ",
      "IkePfs ":" group2 ",
      "IkeAuthAlg ":" sha1 ",
      "Psk ":" pgw6dy7d1i 8in7x5 ",
      "IkeMode ":" main ",
      "IkeLifetim e ": 86400 ,
      "IkeVersion ":" ikev1 ",
      "LocalId ":" 139 . 196 . 32 . 167 "
    }
  }
}

```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbbiden. SubUser	User not authorized to operate on the specified resource as your account is created by another user.	You are not authorized to operate on this resource . Please apply for the permission and try again.
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource . For more information, open a ticket.

HTTP status code	Error code	Error message	Description
404	InvalidVpnConnectionInstanceId.NotFound	The specified vpn connection instance id does not exist.	The specified VPN connection does not exist. Check if the VPN connect is correct.

[See common error codes](#)

13.13 CreateSslVpnServer

Creates an SSL-VPN server.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Type	Required?	Example value	Description
String	Yes	CreateSslVpnServer	The name of this action. Value: CreateSslVpnServer
String	Yes	192.168.1.0/24	The CIDR block from which IP addresses are allocated to the virtual network interface card of the client. It is not the CIDR block of the client. When the client accesses the local end through an SSL-VPN connection, the VPN Gateway allocates an IP address in the specified CIDR block to the client. The CIDR block cannot conflict with the LocalSubnet.

Type	Required?	Example value	Description
String LocalSubnet	Yes	10.0.0.0/8	The CIDR block to be accessed by the client through the SSL-VPN connection. The local CIDR block can be the CIDR block of the VPC, the CIDR block of the VSwitch, the CIDR block of the local data center connected to the VPC through a physical connection, or the CIDR block of an Alibaba Cloud service, such as RDS and OSS.
String RegionId	Yes	cn-hangzhou	The ID of the region to which the VPN Gateway belongs. To query the region ID, call DescribeRegions.
String VpnGatewayId	Yes	vpn-bp1hgim8by0kc9nga5lg3	The ID of the VPN Gateway to be used.
String Encryption	No	AES-128-CBC	The encryption algorithm used by the SSL-VPN server. Valid values: AES - 128 - CBC (default) AES - 192 - CBC AES - 256 - CBC none
String ClientToken	No	02fb3da4-130e-11e9-8e44-0016e04115b	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.
Boolean Compression	No	false	Indicates whether to enable compression.

Type	Required?	Example value	Description
String	No	sslvpnname	The name of the SSL-VPN server. 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. It cannot start with <code>http</code> <code>://</code> or <code>https</code> <code>://</code>.
Integer	No	1194	The port used by the SSL-VPN server. Default value: 1194. The following ports cannot be used: 22, 2222, 22222, 9000, 9001, 9002, 7505, 80, 443, 53, 68, 123, 4510, 4560, 500, and 4500.
String	No	UDP	The protocol used by the SSL-VPN server. Valid values: UDP (default) TCP

Response parameters

Parameter	Type	Example value	Description
Name	String	test	The name of the SSL-VPN server.
RequestId	String	E98A9651-7098-40C7-8F85-C818D1EBBA85	The ID of the request.
SslVpnServerId	String	vss-bp18q7hzj6largv4vk2fe	The ID of the SSL-VPN server.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=CreateSslVpnServer
&ClientIpPool=192.168.1.0/24
&LocalSubnet=10.0.0.0/8
```

```
& RegionId = cn - hangzhou
& VpnGateway Id = vpn - xxxxxxxxxxxx x
& Action = CreateSslVpnServer
& Cipher = AES - 128 - CBC
& ClientToken = aaa
& Compress = false
& Name = aaa
& OwnerAccount =
& OwnerId =
& Port =
& Proto =
& ResourceOwnerIdAccount =
& ResourceOwnerId =
&< CommonParameters >
```

Response example

• XML format

```
< CreateSslVpnServerResponse >
  < RequestId > E98A9651 - 7098 - 40C7 - 8F85 - C818D1EBBA 85 </
  RequestId >
  < SslVpnServerId > vss - bp18q7hzj6 largv4vk2f e </
  SslVpnServerId >
  < Name > test </ Name >
</ CreateSslVpnServerResponse >
```

• JSON format

```
{
  " Name ":" test ",
  " RequestId ":" E98A9651 - 7098 - 40C7 - 8F85 - C818D1EBBA 85 ",
  " SslVpnServerId ":" vss - bp18q7hzj6 largv4vk2f e "
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbidden. SubUser	User not authorized to operate on the specified resource as your account is created by another user.	You are not authorized to operate on this resource . Please apply for the permission and try again.
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource . For more information, open a ticket.
400	Resource. QuotaFull	The quota of resource is full	The resource quota has been reached.

HTTP status code	Error code	Error message	Description
400	InvalidName	The name is not valid	The name format is invalid.
404	InvalidVpnGatewayInstanceId.NotFound	The specified vpn gateway instance id does not exist.	The specified VPN connection does not exist . Check that the VPN connection is correct.
400	VpnGateway.Configuring	The specified service is configuring.	The service is being configured. Please try again later.
400	VpnGateway.FinancialLocked	The specified service is financial locked.	The specified service has an overdue payment . Renew your account to settle the overdue payment.

[See common error codes](#)

13.14 DescribeSslVpnServers

Queries SSL-VPN servers.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeSslVpnServers	The name of this action. Value: DescribeSslVpnServers

Parameter	Type	Required?	Example value	Description
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the SSL-VPN server belongs. To query the region ID, call DescribeRegions.
Name	String	No	test	The name of the SSL-VPN server.
PageNumber	Integer	No	1	The number of pages to return. Default value: 1 .
PageSize	Integer	No	10	The number of rows per page. Maximum value: 50 . Default value: 10 .
SslVpnServerId	String	No	vss-bp15j3du13gq1dgeypy1q	The ID of the SSL-VPN server.
VpnGatewayId	String	No	vpn-bp1on0xae9d771ggiomqe	The ID of the VPN Gateway.

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	085CA5EA-1E76-43A8-981B-E0208DECA0CB	The ID of the request.
SslVpnServers	N/A	N/A	A list of SSL-VPN servers.
⌞Cipher	String	AES-128-CBC	The encryption algorithm used.
⌞ClientIpPool	String	10.10.1.0/24	The IP address pool of the client.

Parameter	Type	Example value	Description
<code>└Compress</code>	Boolean	false	Indicates whether to compress the communication.
<code>└Connections</code>	Integer	0	The number of current connections.
<code>└CreateTime</code>	Long	1544668844000	The time when the SSL-VPN server was created.
<code>└InternetIp</code>	String	47.96.167.xxx	The public IP address.
<code>└LocalSubnet</code>	String	192.168.0.0/24	The CIDR block of the client.
<code>└MaxConnections</code>	Integer	5	The maximum number of concurrent connections.
<code>└Name</code>	String	test	The name of the SSL VPN server.
<code>└Port</code>	Integer	1194	The port used by the SSL-VPN server.
<code>└Proto</code>	String	UDP	The protocol used by the SSL-VPN server.
<code>└RegionId</code>	String	cn-hangzhou	The region of the SSL-VPN server.
<code>└SslVpnServerId</code>	String	vss-bp15j3du13gq1dgeypy1q	The ID of the SSL-VPN server.
<code>└VpnGatewayId</code>	String	vpn-bp1on0xae9d771ggjomqe	The ID of the VPN Gateway.
TotalCount	Integer	1	The number of queried entries.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DescribeSslVpnServers
```

```
& RegionId = cn - hangzhou
&< CommonParameters >
```

Response example

• XML format

```
< DescribeSslVpnServersResponse >
  < PageNumber > 1 </ PageNumber >
  < TotalCount > 1 </ TotalCount >
  < PageSize > 10 </ PageSize >
  < SslVpnServers >
    < SslVpnServer >
      < RegionId > cn - hangzhou </ RegionId >
      < SslVpnServerId > vss - bp18q7hzj6 largv4vk2f e </
SslVpnServerId >
      < VpnGatewayId > vpn - bp1q8bgx4x nkm2ogj0fi u </
VpnGatewayId >
      < Name > test </ Name >
      < ClientIpPool > 10 . 10 . 10 . 20 / 24 </ ClientIpPool >
      < LocalSubnet > 10 . 10 . 10 . 10 / 24 </ LocalSubnet >
      < Proto > UDP </ Proto >
      < Port > 1194 </ Port >
      < Cipher > AES - 128 - CBC </ Cipher >
      < Compress > true </ Compress >
      < CreateTime > 1492753580 000 </ CreateTime >
      < Connections > 0 </ Connections >
      < MaxConnections > 5 </ MaxConnections >
      < InternetIp > 47 . 98 . xx . xx </ InternetIp >
    </ SslVpnServer >
  </ SslVpnServers >
  < RequestId > DF11D6F6 - E35A - 41C3 - 9B20 - 6FC8A901FE 65 </
RequestId >
</ DescribeSslVpnServersResponse >
```

• JSON format

```
{
  "PageNumber": "1",
  "TotalCount": "1",
  "SslVpnServers": {
    "SslVpnServer": {
      "VpnGatewayId": "vpn - bp1q8bgx4x nkm2ogj0fi u",
      "ClientIpPool": "10 . 10 . 10 . 20 / 24",
      "Proto": "UDP",
      "Cipher": "AES - 128 - CBC",
      "InternetIp": "47 . 98 . xx . xx",
      "SslVpnServerId": "vss - bp18q7hzj6 largv4vk2f e",
      "Name": "test",
      "Port": "1194",
      "MaxConnections": "5",
      "RegionId": "cn - hangzhou",
      "CreateTime": "1492753580 000",
      "Compress": "true",
      "LocalSubnet": "10 . 10 . 10 . 10 / 24",
      "Connections": "0"
    }
  },
  "PageSize": "10",
  "RequestId": "DF11D6F6 - E35A - 41C3 - 9B20 - 6FC8A901FE 65"
```

```
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbbiden. SubUser	User not authorized to operate on the specified resource as your account is created by another user.	You are not authorized to operate on this resource . Please apply for the permission and try again.
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource. Please open a ticket.

[See common error codes](#)

13.15 DeleteSslVpnServer

Deletes an SSL-VPN server.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteSslVpnServer	The name of this action. Value: DeleteSslVpnServer
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the SSL-VPN server belongs. To query the region ID, call DescribeRegions.
SslVpnServerId	String	Yes	vss-bp18q7hzj6largv4vk2fe	The ID of the SSL-VPN server.

Parameter	Type	Required?	Example value	Description
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	606998F0-B94D-48FE-8316-ACA81BB230DA	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DeleteSslVpnServer
&RegionId=cn-hangzhou
&SslVpnServerId=vss-bp18q7hzj6-largv4vk2fe
&<CommonParameters>
```

Response example

- XML format

```
<DeleteSslVpnServerResponse>
  <RequestId>606998F0-B94D-48FE-8316-ACA81BB230DA</RequestId>
</DeleteSslVpnServerResponse>
```

- JSON format

```
{
  "RequestId": "606998F0-B94D-48FE-8316-ACA81BB230DA"
}
```

```
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbbiden. SubUser	User not authorized to operate on the specified resource as your account is created by another user.	You are not authorized to operate on this resource . Please apply for the permission and try again.
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource . For more information, open a ticket.
400	VpnGateway. Configuring	The specified service is configuring.	The service is being configured. Please try again later.
400	VpnGateway. FinancialLocked	The specified service is financial locked.	The specified service has an overdue payment. Renew your account to settle the payment.

[See common error codes](#)

13.16 ModifySslVpnServer

Modifies the configurations of an SSL-VPN server.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ModifySslVpnServer	The name of this action. Value: ModifySslVpnServer

Parameter	Type	Required?	Example value	Description
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the VPN Gateway belongs. To query the region ID, call DescribeRegions.
SslVpnServerId	String	Yes	vss-bp18q7hzj6largv4vk2fe	The ID of the SSL-VPN server.
Cipher	String	No	AES-128-CBC	The encryption algorithm used by the SSL-VPN server. Valid values: AES - 128 - CBC (default) AES - 192 - CBC AES - 256 - CBC none
ClientIpPool	String	Yes	10.30.30.0/2	The CIDR block from which IP addresses are allocated to the virtual network interface card of the client. It is not the CIDR block of the client. When the client accesses the local end through an SSL-VPN connection, the VPN Gateway allocates an IP address in the specified CIDR block to the client. The CIDR block cannot conflict with the LocalSubnet.

Parameter	Type	Required?	Example value	Description
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.
Compress	Boolean	No	false	Indicates whether to enable compression. Valid values: true (default) false
LocalSubnet	String	No	10.20.20.0/24	The CIDR block to be accessed by the client through the SSL-VPN connection. The local CIDR block can be the CIDR block of the VPC, the CIDR block of the VSwitch, the CIDR block of the on-premises data center connected to the VPC through a physical connection, or the CIDR block of an Alibaba Cloud service, such as RDS or OSS.

Parameter	Type	Required ?	Example value	Description
Name	String	No	test	The name of the SSL-VPN server. 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. It cannot start with <code>http://</code> or <code>https://</code>.
Port	Integer	No	1194	The port used by the SSL-VPN server. Default value: 1194. The following ports cannot be used: 22, 2222, 22222, 9000, 9001, 9002, 7505, 80, 443, 53, 68, 123, 4510, 4560, 500, and 4500.
Proto	String	No	UDP	The protocol used by the SSL-VPN server.

Response parameters

Parameter	Type	Example value	Description
Cipher	String	AES-128-CBC	The encryption algorithm used.
ClientIpPool	String	10.30.30.0/24	The IP address pool of the client.
Compress	Boolean	false	Whether to compress the communication.
Connections	Integer	0	The number of current connections.

Parameter	Type	Example value	Description
CreateTime	Long	1492753580000	The time at which the SSL-VPN server was created.
InternetIp	String	47.98.xx.xx	The public IP address.
LocalSubnet	String	10.20.20.0/24	The CIDR block of the local client.
MaxConnections	Integer	5	The maximum number of concurrent connections.
Name	String	test	The name of the SSL-VPN server.
Port	Integer	1194	The port of the SSL-VPN server.
Proto	String	UDP	The protocol used by the SSL-VPN server.
RegionId	String	cn-hangzhou	The ID of the region to which the SSL-VPN server belongs.
RequestId	String	DF11D6F6-E35A-41C3-9B20-6FC8A901FE65	The ID of the request.
SslVpnServerId	String	vss-bp18q7hzj6largv4vk2fe	The ID of the SSL-VPN server.
VpnGatewayId	String	vpn-bp1q8bgx4xnkm2ogj0fiu	The ID of the VPN Gateway.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=ModifySslVpnServer
&RegionId=cn-hangzhou
&SslVpnServerId=vss-bp18q7hzj6largv4vk2fe
&<CommonParameters>
```

Response example

- XML format

```
<ModifySslVpnServerResponse>
```

```

< PageNumber > 1 </ PageNumber >
< TotalCount > 1 </ TotalCount >
< PageSize > 10 </ PageSize >
< SslVpnServers >
  < SslVpnServer >
    < RegionId > cn - hangzhou </ RegionId >
    < SslVpnServerId > vss - bp18q7hzj6 largv4vk2f e </
SslVpnServerId >
    < VpnGatewayId > vpn - bp1q8bgx4x nkm2ogj0fi u </
VpnGatewayId >
    < Name > test </ Name >
    < ClientIpPool > 10 . 30 . 30 . 0 / 24 </ ClientIpPool >
    < LocalSubnet > 10 . 20 . 20 . 0 / 24 </ LocalSubnet >
    < Proto > UDP </ Proto >
    < Port > 1194 </ Port >
    < Cipher > AES - 128 - CBC </ Cipher >
    < Compress > true </ Compress >
    < CreateTime > 1492753580 000 </ CreateTime >
    < Connections > 0 </ Connections >
    < MaxConnections > 5 </ MaxConnections >
    < InternetIp > 47 . 98 . xx . xx </ InternetIp >
  </ SslVpnServer >
</ SslVpnServers >
< RequestId > DF11D6F6 - E35A - 41C3 - 9B20 - 6FC8A901FE 65 </
RequestId >
</ ModifySslVpnServerResponse >

```

• JSON format

```

{
  "PageNumber ":" 1 ",
  "TotalCount ":" 1 ",
  "SslVpnServers ":{
    "SslVpnServer ":{
      "VpnGatewayId ":" vpn - bp1q8bgx4x nkm2ogj0fi u ",
      "ClientIpPool ":" 10 . 30 . 30 . 0 / 24 ",
      "Proto ":" UDP ",
      "Cipher ":" AES - 128 - CBC ",
      "InternetIp ":" 47 . 98 . xx . xx ",
      "SslVpnServerId ":" vss - bp18q7hzj6 largv4vk2f e ",
      "Name ":" test ",
      "Port ":" 1194 ",
      "MaxConnections ":" 5 ",
      "RegionId ":" cn - hangzhou ",
      "CreateTime ":" 1492753580 000 ",
      "Compress ":" true ",
      "LocalSubnet ":" 10 . 20 . 20 . 0 / 24 ",
      "Connections ":" 0 "
    }
  },
  "PageSize ":" 10 ",
  "RequestId ":" DF11D6F6 - E35A - 41C3 - 9B20 - 6FC8A901FE 65 "
}

```

```
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbbiden. SubUser	User not authorized to operate on the specified resource as your account is created by another user.	You are not authorized to operate on this resource . Please apply for the permission and try again.
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource. Please open a ticket.
400	InvalidName	The name is not valid	The name format is invalid.
400	VpnGateway. Configuring	The specified service is configuring.	The service is being configured. Please try again later.
400	VpnGateway. FinancialLocked	The specified service is financial locked.	The service is stopped due to insufficient account balance. Please renew your account first.

[See common error codes](#)

13.17 DeleteSslVpnClientCert

Deletes an SSL-VPN client certificate.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteSslVpnClientCert	The name of this action. Value: DeleteSslVpnClientCert
RegionId	String	Yes	cn-hangzhou	The region to which the SSL-VPN client certificate belongs. To query the region ID, call DescribeRegions.
SslVpnClientCertId	String	Yes	vsc-bp1n8wcf134yl0osrcg98	The ID of the SSL-VPN client certificate.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	606998F0-B94D-48FE-8316-ACA81BB230DA	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DeleteSslVpnClientCert
&RegionId=cn-hangzhou
&SslVpnClientCertId=vsc-bp1n8wcf134yl0osrcg98
```

```
&< CommonRequestParameters >
```

Response example

- XML format

```
< DeleteSslVpnClientCertificateResponse >
  < RequestId > 606998F0 - B94D - 48FE - 8316 - ACA81BB230 DA </
    RequestId >
</ DeleteSslVpnClientCertificateResponse >
```

- JSON format

```
{
  "RequestId ":" 606998F0 - B94D - 48FE - 8316 - ACA81BB230 DA "
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbidden. SubUser	User not authorized to operate on the specified resource as your account is created by another user.	You are not authorized to operate on this resource . Please apply for the permission and try again.
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource . For more information, open a ticket.
400	VpnGateway. Configuring	The specified service is configuring.	The service is being configured. Please try again later.

[See common error codes](#)

13.18 ModifySslVpnClientCert

Modifies the name of an SSL-VPN client certificate.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ModifySslVpnClientCert	The name of this action. Value: ModifySslVpnClientCert
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the SSL-VPN client certificate belongs. To query the region ID, call DescribeRegions.
SslVpnClientCertId	String	Yes	vsc-bp1n8wcf134yl0osrcg98	The ID of the SSL-VPN client certificate.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.
Name	String	No	cert2	The name of the SSL-VPN client certificate. 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. It cannot start with <code>http://</code> or <code>https://</code> .

Response parameters

Parameter	Type	Example value	Description
Name	String	cert2	The name of the client certificate.
RequestId	String	606998F0-B94D-48FE-8316-ACA81BB230DA	The ID of the request.

Examples

Request example

```
https :// vpc . aliyuncs . com /? Action = ModifySslVpnClientCertificate
& RegionId = cn - hangzhou
& SslVpnClientCertificateId = vsc - bp1n8wcf13 4yl0osrcg9 8
& Name = cert2
&< CommonParameters >
```

Response example

• XML format

```
< ModifySslVpnClientCertificateResponse >
  < SslVpnClientCertificateId > vsc - bp1n8wcf13 4yl0osrcg9 8 </
  SslVpnClientCertificateId >
  < Name > cert2 </ Name >
  < RequestId > 606998F0 - B94D - 48FE - 8316 - ACA81BB230 DA </
  RequestId >
</ ModifySslVpnClientCertificateResponse >
```

• JSON format

```
{
  " Name ":" cert2 ",
  " RequestId ":" 606998F0 - B94D - 48FE - 8316 - ACA81BB230 DA ",
  " SslVpnClientCertificateId ":" vsc - bp1n8wcf13 4yl0osrcg9 8 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbidden.SubUser	User not authorized to operate on the specified resource as your account is created by another user.	You are not authorized to operate on this resource. Apply for the permission and try again.

HTTP status code	Error code	Error message	Description
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource . For more information, open a ticket.
400	InvalidName	The name is not valid	The name format is invalid.

[See common error codes](#)

13.19 ModifyVpnGatewayAttribute

Modifies the name and description of a VPN Gateway.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required ?	Example value	Description
Action	String	Yes	ModifyVpnGatewayAttribute	The name of this action. Value: ModifyVpnGatewayAttribute
RegionId	String	Yes	cn-shanghai	The ID of the region to which the VPN Gateway belongs. To query the region ID, call DescribeRegions.
VpnGatewayId	String	Yes	vpn-bp1q8bgx4xnkm2ogj0fiu	The ID of the VPN Gateway.

Parameter	Type	Required ?	Example value	Description
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.
Description	String	No	vpn Gateway	The description of the VPN Gateway. The description must be 2 to 256 characters in length. It must start with a letter, but cannot start with <code>http ://</code> or <code>https ://</code>.
Name	String	No	myvpn	The name of the VPN Gateway. The name must be between 2 and 128 characters in length. It can contain letters, numbers, periods (.), underscores (_), or hyphens (-). The name must start with a letter. It cannot start with <code>http ://</code> or <code>https ://</code>.

Response parameters

Parameter	Type	Example value	Description
VpnGatewayId	String	vpn-bp1q8bgx4xnkm2ogj0fiu	The ID of the VPN Gateway.

Parameter	Type	Example value	Description
VpcId	String	vpc-bp1ub1yt9cvakoelj1y9	The ID of the VPC to which the VPN Gateway belongs.
VSwitchId	String	vsw-bp1y9ovl1cu9ou4tvma0l	The ID of the VSwitch to which the VPN Gateway belongs.
InternetIp	String	116.62.69.xxx	The public IP address of the VPN Gateway.
CreateTime	Long	1492753580000	The time at which the VPN Gateway was created.
EndTime	Long	1495382400000	The time at which the VPN Gateway is to expire.
Spec	String	5M	The specification of the VPN Gateway.
Name	String	test	The name of the VPN Gateway.
Description	String	test	The description of the VPN Gateway.
Status	String	active	The status of the VPN Gateway.
BusinessStatus	String	Normal	The business status of the VPN Gateway.
IntranetIp	String	172.16.104.xxx	The public IP address of the VPN Gateway.
RequestId	String	54B48E3D-DF70-471B-AA93-08E683A1B457	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=ModifyVpnGatewayAttribute
&RegionId=cn-shanghai
&VpnGatewayId=vpn-bp1q8bgx4xnkm2ogj0fiu
&<CommonParameters>
```

Response example

• XML format

```
<ModifyVpnGatewayAttributeResponse>
  <Name>aaa</Name>
  <Status>active</Status>
  <VpnGatewayId>vpn-bp1q8bgx4xnkm2ogj0fiu</VpnGatewayId>
  <BusinessStatus>Normal</BusinessStatus>
  <Spec>5M</Spec>
  <CreateTime>1492753580000</CreateTime>
  <IntranetIp>172.16.104.xxx</IntranetIp>
  <RequestId>54B48E3D-DF70-471B-AA93-08E683A1B457</RequestId>
  <InternetIp>116.62.69.xxx</InternetIp>
  <EndTime>1495382400000</EndTime>
  <VSwitchId>vsw-bp1y9ovl1cu9ou4tvma0l</VSwitchId>
  <VpcId>vpc-bp1ublyt9cvakoeljly9c</VpcId>
</ModifyVpnGatewayAttributeResponse>
```

• JSON format

```
{
  "Name": "aaa",
  "Status": "active",
  "VpnGatewayId": "vpn-bp1q8bgx4xnkm2ogj0fiu",
  "Spec": "5M",
  "BusinessStatus": "Normal",
  "RequestId": "BA56EAF8-E3A9-4BE6-8511-8F03512153E2",
  "IntranetIp": "172.16.104.xxx",
  "CreateTime": 1492753580000,
  "InternetIp": "116.62.69.xxx",
  "EndTime": 1495382400000,
  "VSwitchId": "vsw-bp1y9ovl1cu9ou4tvma0l",
  "VpcId": "vpc-bp1ublyt9cvakoeljly9c"
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbidden.SubUser	User not authorized to operate on the specified resource as your account is created by another user.	You are not authorized to operate on this resource.

HTTP status code	Error code	Error message	Description
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource . For more information, open a ticket.
404	InvalidVpnGatewayInstanceId.NotFound	The specified vpn gateway instance id does not exist.	The specified VPN Gateway does not exist.
400	InvalidName	The name is not valid	The name format is invalid.
400	InvalidDescription	The description is not valid	The description format is invalid.

[See common error codes](#)

13.20 CreateVpnConnection

Creates an IPsec connection.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreateVpnConnection	The action to perform. Valid value: CreateVpnConnection
CustomerGatewayId	String	Yes	vpn-bp1q8bgx4xnkm2ogj0fiu	The ID of the customer gateway .

Parameter	Type	Required?	Example value	Description
LocalSubnet	string	Yes	1.1.1.0/24,1.1.2.0/24	The CIDR block of the VPC to be connected with the on-premises data center. This parameter is used for phase two negotiation. Separate multiple CIDR blocks with commas (.). For example, 192.168.1.0/24, 192.168.2.0/24.
RegionId	String	Yes	cn-shanghai	The region of the IPsec connection. You can obtain the region ID by calling the DescribeRegions API.
RemoteSubnet	String	Yes	1.1.1.0/24,1.1.2.0/24	The CIDR block of the on-premises data center. This parameter is used for phase two negotiation. Separate multiple CIDR blocks by commas (.). For example, 92.168.3.0/24, 192.168.4.0/24.
VpnGatewayId	String	Yes	vpn-bp1q8bgx4xnkm2ogj0fiu	The ID of the VPN Gateway.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.

Parameter	Type	Required ?	Example value	Description
EffectImmediately	Boolean	No	false	Indicates whether to delete a successfully negotiated IPsec tunnel and initiate a negotiation again. Valid values: · true : Negotiate immediately after the configuration is completed. · false (default): Negotiate when inbound traffic is detected.

Parameter	Type	Required?	Example value	Description
IkeConfig	JSON String	No	ikev1	The configurations of phase one negotiation: • <code>IkeConfig . Psk</code> : Used for authentication between the IPsec VPN gateway and the customer gateway. This parameter is generated randomly by default and can contain up to 100 characters. You can also manually specify the key. • <code>IkeConfig . IkeVersion</code> : The version of the IKE protocol. Valid values: <code>ikev1</code> <code>ikev2</code> . Default value: <code>ikev1</code> . • <code>IkeConfig . IkeMode</code> : The negotiation mode of IKE V1. Valid values: <code>main</code> (<code>main mode</code>) <code>aggressive</code> (<code>aggressive mode</code>) . Default value: <code>main</code> . • <code>Ikeconfig . IkeEncAlg</code> : The encryption algorithm of phase one negotiation. Valid values: <code>aes</code> <code>aes192</code> <code>aes256</code> <code>des</code> <code>3des</code> . Default value: <code>aes</code> . • <code>IkeConfig . IkeAuthAlg</code> : The authentication algorithm of phase one negotiation. Valid values:

Parameter	Type	Required?	Example value	Description
<code>IpssecConfig</code>	JSON String	No	<code>aes</code>	The configurations of phase two negotiation: <code>IpssecConfig.IpssecEncAlg</code>: The encryption algorithm of phase two negotiation. Valid values: <code>aes</code> <code>aes192</code> <code>aes256</code> <code>des</code> <code>3des</code>. Default value: <code>aes</code>. <code>IpssecConfig.IpssecAuthAlg</code>: The authentication algorithm of phase two negotiation. Valid values: <code>md5</code> <code>sha1</code>. Default value: <code>sha1</code>. <code>IpssecConfig.IpssecPfs</code>: Forward packets of all protocols. The Diffie-Hellman key exchange algorithm used by phase one negotiation. Valid values: <code>group1</code> <code>group2</code> <code>group5</code> <code>group14</code> <code>group24</code>. Default value: <code>group2</code>. <code>IpssecConfig.IpssecLifetime</code>: The SA lifetime value resulting from phase two negotiation. Valid value: [0, 86400]. Default value: 86400. Unit: seconds.

Parameter	Type	Required?	Example value	Description
Name	String	No	IPsec	The name of the IPsec connection. The name must be 2 to 128 characters in length and contain letters, numbers, periods (.), underscores (_), and hyphens (-). The name must start with a letter. It cannot start with <code>http ://</code> or <code>https ://</code>.

Response parameters

Parameter	Type	Example value	Description
VpnConnectionId	String	vco-bp15oes1py4i66rmdnc7k	The ID of the IPsec connection.
CreateTime	Long	1544666102000	The time at which the IPsec connection was created.
Name	String	test	The name of the IPsec connection.
RequestId	String	082AD562-B8DB-4BB2-861F-DA1FCA01FD76	The ID of the request.

Examples

Request example

```
https :// vpc . aliyuncs . com /? Action = CreateVpnConnection
& CustomerGatewayId = vpn - bp1q8bgx4x nkm2ogj0fi u
& LocalSubnet = 1 . 1 . 1 . 0 / 24 , 1 . 1 . 2 . 0 / 24
& RegionId = cn - shanghai
& RemoteSubnet = 1 . 1 . 1 . 0 / 24 , 1 . 1 . 2 . 0 / 24
& VpnGatewayId = vpn - bp1q8bgx4x nkm2ogj0fi u
&< CommonParameters >
```

Response example

- XML format

```
< CreateVpnC onnectionR esponse >
  < VpnConnect ionId > vco - bp1bbi27ho jx80nck9k1 i </
  VpnConnect ionId >
  < CreateTime > 1493363928 000 </ CreateTime >
</ CreateVpnC onnectionR esponse >
```

- JSON format

```
{
  " VpnConnect ionId ":" vco - bp15oes1py 4i66rmdnc7 k ",
  " CreateTime ": 1544666102 000
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbidden. SubUser	User not authorized to operate on the specified resource as your account is created by another user.	You are not authorized to operate on this resource.
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource.
400	Resource. QuotaFull	The quota of resource is full	The resource quota has been reached.
404	InvalidCustomerGatewayInstance. NotFound	The specified customer gateway instance id does not exist.	The specified instance does not exist.
404	InvalidVpnGatewayInstance. NotFound	The specified vpn gateway instance id does not exist.	The specified VPN Gateway does not exist.
400	InvalidVpnConnection. AlreadyExists	Vpn connection already exists.	The VPN connection already exists.
400	VpnGateway. Configuring	The specified service is configuring.	The specified service is being configured.

HTTP status code	Error code	Error message	Description
400	VpnGateway.FinancialLocked	The specified service is financial locked.	The specified service is locked due to insufficient account balance.

[See common error codes](#)

13.21 DescribeVpnConnections

Queries one or more IPsec connections.

Debug

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

Request parameters

Parameter	Type	Required ?	Example value	Description
Action	String	Yes	DescribeVpnConnections	The name of this action. Value: DescribeVpnConnections.
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the IPsec connection belongs. To query the region ID, call DescribeRegions .
CustomerGatewayId	String	No	cgw-bp1mvj4g9kogwxxxxxxxxx	The ID of the customer gateway.
PageNumber	Integer	No	1	The number of pages to return. Default value: 1.

Parameter	Type	Required ?	Example value	Description
PageSize	Integer	No	10	The number of rows per page . Maximum value: 50. Default value: 10.
VpnGateway Id	String	No	vpn-bp1q8bgx4xnkxxxxxxxx	The ID of the VPN Gateway.

Response parameters

Parameter	Type	Example value	Description
VpnConnections			A list of IPsec connections.
└ IkeConfig			Configurations of phase one negotiation.
└ IkeAuthAlg	String	sha1	The IKE authentication algorithm. Both SHA-1 and MD5 are supported .
└ IkeEncAlg	String	aes	The IKE encryption algorithm.
└ IkeLifetime	Long	86400	The IKE lifetime.
└ IkeMode	String	main	The IKE mode. Both main mode and aggressive mode are supported. The main mode features high security. If NAT traversal is enabled , we recommend that you select the aggressive mode.
└ IkePfs	String	group2	The DH group. Valid values: group1 group2 group5 group14 group24

Parameter	Type	Example value	Description
<code>└─IkeVersion</code>	String	ikev1	The IKE version.
<code>└─LocalId</code>	String	116.xx.xx.64	The local ID. It is the IP address of the VPN Gateway by default. Both FQDN and IP formats are supported.
<code>└─Psk</code>	String	pgw6dy7dxx xxxxxxx	The pre-shared key.
<code>└─RemoteId</code>	String	139.xx.xx.167	The peer ID. It is the IP address of the customer gateway by default. Both FQDN and IP formats are supported.
<code>└─IpsecConfig</code>			Configurations of phase two negotiation.
<code>└─IpsecAuthAlg</code>	String	sha1	The IPsec authentication algorithm. Both SHA-1 and MD5 are supported.
<code>└─IpsecEncAlg</code>	String	aes	The IPsec encryption algorithm.
<code>└─IpsecLifetime</code>	Long	86400	The IPsec encryption algorithm.
<code>└─IpsecPfs</code>	String	group2	The DH group.
<code>└─VpnConnectionId</code>	String	vco-bp10lz7aej umdxxxxxxxxx	The ID of the IPsec connection.
<code>└─CustomerGatewayId</code>	String	vpn-bp1q8bgx4x nkxxxxxxxxx	The ID of the customer gateway.
<code>└─VpnGatewayId</code>	String	vpn-bp1q8bgx4x nkmxxxxxxxxx	The ID of the VPN Gateway.

Parameter	Type	Example value	Description
<code>⌞Name</code>	String	xxxxxxxxxxxxx	The name of the IPsec connection.
<code>⌞LocalSubnet</code>	String	1.1.1.0/24,1.1.2.0/24	The CIDR block of the VPC.
<code>⌞RemoteSubnet</code>	String	1.1.1.0/24,1.1.2.0/24	The CIDR block of the on-premises data center.
<code>⌞CreateTime</code>	Long	1492753817000	The time at which the IPsec connection was created.
<code>⌞Status</code>	String	ipsec_sa_established	The connection status. Valid values: - ike_sa_not_established: Phase one negotiation failed. - ike_sa_established: Phase one negotiation succeeded. - ipsec_sa_not_established: Phase two negotiation failed. - ipsec_sa_established: Phase two negotiation succeeded.
<code>⌞EffectImmediately</code>	Boolean	true	Indicates whether the IPsec connection takes effect immediately. - true: Reconnection is triggered when there is a change to the network configuration. - false: Reconnection is triggered when traffic is detected over the network. A reconnection may cause intermittent connections.
<code>⌞VcoHealthCheck</code>			Health check.
<code>⌞Dip</code>	String	8.xx.xx.8	The destination IP address.
<code>⌞Interval</code>	Integer	2	The time interval between two consecutive health checks.

Parameter	Type	Example value	Description
<code>⌞Sip</code>	String	192.xx.xx.66	The source IP address.
<code>TotalCount</code>	Integer	10	The number of queried entries.
<code>PageNumber</code>	Integer	1	The current page number.
<code>PageSize</code>	Integer	10	The number of entries per page.
<code>RequestId</code>	String	54A4B3D0-DF4D-4C54-B8DC-5DC8DD49C939	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DescribeVpnConnections
&RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

XML format

```
<DescribeVpnConnections>
  <PageNumber>1</PageNumber>
  <VpnConnections>
    <VpnConnection>
      <Name>vpn_connection_test</Name>
      <CustomerGatewayId>cgw-bp1pvpl9r9adjxxxxxxxx</CustomerGatewayId>
      <RemoteSubnet>2.2.2.0/24</RemoteSubnet>
      <IpsecConfig>
        <IpsecLifetime>86400</IpsecLifetime>
        <IpsecAuthAlg>sha1</IpsecAuthAlg>
        <IpsecPfs>group2</IpsecPfs>
        <IpsecEncAlg>aes</IpsecEncAlg>
      </IpsecConfig>
      <EffectImmediately>true</EffectImmediately>
      <VpnGatewayId>vpn-bp1q8bgx4xnmxxxxxxxx</VpnGatewayId>
      <CreateTime>1492753817000</CreateTime>
      <VpnConnectionId>vco-bp10lz7aejumdxxxxxxxx</VpnConnectionId>
      <status>ipsec_sae_established</status>
      <LocalSubnet>1.1.1.0/24,1.1.2.0/24</LocalSubnet>
      <IkeConfig>
        <IkeEncAlg>aes</IkeEncAlg>
        <RemoteId>139.xx.xx.167</RemoteId>
        <IkePfs>group2</IkePfs>
      </IkeConfig>
    </VpnConnection>
  </VpnConnections>
</DescribeVpnConnections>
```

```

    < IkeAuthAlg > sha1 </ IkeAuthAlg >
    < Psk > pgw6dyxxxx xxxx </ Psk >
    < IkeMode > main </ IkeMode >
    < IkeLifetim e > 86400 </ IkeLifetim e >
    < IkeVersion > ikev1 </ IkeVersion >
    < LocalId > 116 . xx . xx . 64 </ LocalId >
  </ IkeConfig >
</ VpnConnect ion >
</ VpnConnect ions >
< TotalCount > 1 </ TotalCount >
< PageSize > 10 </ PageSize >
< RequestId > 54A4B3D0 - DF4D - 4C54 - B8DC - 5DC8DD49C9 39 </
RequestId >
</ DescribeVp nConnectio ns >

```

JSON format

```

{
  " PageNumber ": 1 ,
  " VpnConnect ions ": {
    " VpnConnect ion ": [
      {
        " CustomerGa tewayId ":" cgw - bp1pvpl9r9 adjxxxxxxxx x ",
        " Name ": " vpn connection test ",
        " RemoteSubn et ":" 2 . 2 . 2 . 0 / 24 ",
        " IpsecConfi g ":{
          " IpsecLifet ime ": 86400 ,
          " IpsecAuthA lg ":" sha1 ",
          " IpsecPfs ":" group2 ",
          " IpsecEncAl g ":" aes "
        },
        " VpnGateway Id ":" vpn - bp1q8bgx4x nkmxxxxxxxx x ",
        " EffectImme diately ": true ,
        " status ":" ipsec_sa_e stablished ",
        " VpnConnect ionId ":" vco - bp10lz7aej umdxxxxxxxx x ",
        " CreateTime ": 1492753817 000 ,
        " LocalSubne t ":" 1 . 1 . 1 . 0 / 24 , 1 . 1 . 2 . 0 / 24 ",
        " IkeConfig ":{
          " IkeEncAlg ":" aes ",
          " IkePfs ":" group2 ",
          " RemoteId ":" 139 . xx . xx . 167 ",
          " IkeAuthAlg ":" sha1 ",
          " Psk ":" pgw6dyxxxx xxxx ",
          " IkeMode ":" main ",
          " IkeLifetim e ": 86400 ,
          " IkeVersion ":" ikev1 ",
          " LocalId ":" 116 . xx . xx . 64 "
        }
      }
    ]
  },
  " TotalCount ": 1 ,
  " PageSize ": 10 ,
  " RequestId ": " 54A4B3D0 - DF4D - 4C54 - B8DC - 5DC8DD49C9 39 "
}

```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbbiden. SubUser	User not authorized to operate on the specified resource as your account is created by another user.	You are not authorized to operate on this resource . Please apply for the permission and try again later.
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource . For more information, open a ticket.

[See common error codes](#)

13.22 ModifyVpnConnectionAttribute

Modifies the configurations of an IPsec connection.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required ?	Example value	Description
Action	String	Yes	ModifyVpnC onnectionA ttribute	The name of this action. Value: ModifyVpnC onnectionA ttribute
RegionId	String	Yes	cn-shanghai	The ID of the region to which the IPsec connection belongs. To query the region ID, call DescribeRegions.

Parameter	Type	Required?	Example value	Description
VpnConnectionId	String	Yes	vco-bp1bbi27hojx80nck9k1i	The ID of the IPsec connection.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.
EffectImmediately	Boolean	No	false	Indicates whether to delete a successfully negotiated IPsec tunnel and initiate a negotiation again. Valid value: · true : Negotiate immediately after the configuration is completed. · false (default): Negotiate when traffic is detected over the network.

Parameter	Type	Required ?	Example value	Description
IkeConfig	JSON String	No	ikev1, ikev2	The configurations of phase one negotiation: • <code>IkeConfig . Psk</code> : Used for authentication between the IPsec VPN gateway and the customer gateway. By default, this parameter is generated randomly and can contain up to 100 characters. You can also manually specify the key. • <code>IkeConfig . IkeVersion</code> : The version of the IKE protocol. Valid values: <code>ikev1</code> <code>ikev2</code> . Default value: <code>ikev1</code> . • <code>IkeConfig . IkeMode</code> : The negotiation mode of IKE V1. Valid values: <code>main</code> (<code>main mode</code>) <code>aggressive</code> (<code>aggressive mode</code>) . Default value: <code>main</code> . • <code>IkeConfig . IkeEncAlg</code> : The encryption algorithm of phase one negotiation. Valid values: <code>aes</code> <code>aes192</code> <code>aes256</code> <code>des</code> <code>3des</code> . Default value: <code>aes</code> . • <code>IkeConfig . IkeAuthAlg</code> : The authentication algorithm of phase one negotiation. Valid values:

Parameter	Type	Required?	Example value	Description
<code>IpssecConfig</code>	JSON String	No	aes	The configurations of phase-two negotiation: <code>IpssecConfig.IpssecEncAlg</code>: The encryption algorithm of phase-two negotiation. Valid value: aes aes192 aes256 des 3des. Default value: aes. <code>IpssecConfig.IpssecAuthAlg</code>: The authentication algorithm of phase-two negotiation. Valid value: md5 sha1. Default value: sha1. <code>IpssecConfig.IpssecPfs</code>: Forward packets of all protocols. The Diffie-Hellman key exchange algorithm used by phase-one negotiation. Valid value: group1 group2 group5 group14 group24. Default value: group2. <code>IpssecConfig.IpssecLifetime</code>: The SA lifecycle as the result of phase-two negotiation. The valid value is [0, 86400], the unit is second and the default value is 86400.

Parameter	Type	Required ?	Example value	Description
LocalSubnet	String	Yes	1.1.1.0/24,1.1.2.0/24	The CIDR block of the VPC to be connected with the on-premises data center. This parameter is used for phase two negotiation. Separate multiple CIDR blocks with commas (.). For example, 192.168.1.0/24,192.168.2.0/24.
Name	String	No	IPsec	The name of the IPsec connection. 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. It cannot start with <code>http://</code> or <code>https://</code> .
RemoteSubnet	String	No	1.1.1.0/24,1.1.2.0/24	The CIDR block of the local data center. This parameter is used for phase-two negotiation. Separate multiple CIDR blocks with commas (.). For example, 92.168.3.0/24, 192.168.4.0/24.

Response parameters

Parameter	Type	Example value	Description
VpnConnectionId	String	vco-bp1bbi27hojx80nck9k1i	The ID of the IPsec connection.
CustomerGatewayId	String	vpn-bp1q8bgx4xnkm2ogj0fiu	The ID of the customer gateway.
VpnGatewayId	String	vpn-bp1q8bgx4xnkm2ogj0fiu	The ID of the VPN Gateway.
Name	String	xxxxxxx	The name of the IPsec connection.

Parameter	Type	Example value	Description
LocalSubnet	String	1.1.1.0/24,1.1.2.0/24	The CIDR block of the VPC.
RemoteSubnet	String	1.1.1.0/24,1.1.2.0/24	The CIDR block of the on-premises data center.
CreateTime	Long	1492753817000	The time at which the IPsec connection was created.
Description	String	xxxxxxx	The description.
EffectImmediately	Boolean	false	Indicates whether the IPsec connection takes effect immediately.
IkeConfig			Configurations of phase one negotiation.
└─IkeAuthAlg	String	sha1	The IKE authentication algorithm. SHA-1 and MD5 are supported.
└─IkeEncAlg	String	aes	The IKE encryption algorithm.
└─IkeLifetime	Long	86400	The IKE lifetime.
└─IkeMode	String	main	The IKE mode. Both main mode and aggressive mode are supported. The main mode features high security. If NAT traversal is enabled, we recommend that you select the aggressive mode.
└─IkePfs	String	group2	The DH group. Valid values:group1 group2 group5 group14 group24
└─IkeVersion	String	ikev1	The IKE version.

Parameter	Type	Example value	Description
LocalId	String	116.62.69.64	The local ID. It is the IP address of the VPN Gateway by default. Both FQDN and IP formats are supported.
Psk	String	pgw6dy7d1i8in7x5	The pre-shared key.
RemoteId	String	139.196.32.167	The peer ID. By default, it is the IP address of the customer gateway. Both FQDN and IP formats are supported.
IpsecConfig			Configurations of phase two negotiation.
IpsecAuthAlg	String	sha1	The IPsec authentication algorithm. Both SHA-1 and MD5 are supported.
IpsecEncAlg	String	aes	The IPsec encryption algorithm.
IpsecLifetime	Long	86400	The IPsec lifetime.
IpsecPfs	String	group2	The DH group.
RequestId	String	7DB79D0C-5F27-4AB5-995B-79BE55102F90	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=ModifyVpnConnectionAttribute
&RegionId=cn-shanghai
&VpnConnectionId=vco-bp1bbi27hojx80nck9k1i
&<CommonParameters>
```

Response example

- XML format

```
< ModifyVpnC onnectionA ttributeRe sponse >
  < Name > vpn   connection   test </ Name >
  < CustomerGa tewayId > cgw - bp1pvpl9r9   adju6l5nxc   k </
CustomerGa tewayId >
  < RemoteSubn et > 2 . 2 . 2 . 0 / 24 </ RemoteSubn et >
  < IpsecConfi g >
    < IpsecLifet ime > 86400 </ IpsecLifet ime >
    < IpsecAuthA lg > sha1 </ IpsecAuthA lg >
    < IpsecPfs > group2 </ IpsecPfs >
    < IpsecEncAl g > aes </ IpsecEncAl g >
  </ IpsecConfi g >
  < EffectImme diately > false </ EffectImme diately >
  < VpnGateway Id > vpn - bp1q8bgx4x   nkm2ogj0fi   u </ VpnGateway
Id >
  < CreateTime > 1492753817   000 </ CreateTime >
  < VpnConnect ionId > vco - bp10lz7aej   umd2vxogge   v </
VpnConnect ionId >
  < RequestId > 57070A3D - 38F2 - 40A6 - A1C9 - DB14542EF5   4D </
RequestId >
  < LocalSubne t > 1 . 1 . 1 . 0 / 24 , 1 . 1 . 2 . 0 / 24 </
LocalSubne t >
  < IkeConfig >
    < IkeEncAlg > aes </ IkeEncAlg >
    < RemoteId > 139 . 196 . 32 . 167 </ RemoteId >
    < IkePfs > group2 </ IkePfs >
    < IkeAuthAlg > sha1 </ IkeAuthAlg >
    < Psk > pgw6dy7d1i   8in7x5 </ Psk >
    < IkeMode > main </ IkeMode >
    < IkeLifetim e > 86400 </ IkeLifetim e >
    < IkeVersion > ikev1 </ IkeVersion >
    < LocalId > 116 . 62 . 69 . 64 </ LocalId >
  </ IkeConfig >
</ ModifyVpnC onnectionA ttributeRe sponse >
```

- JSON format

```
{
  " CustomerGa tewayId ":" cgw - bp1pvpl9r9   adju6l5nxc   k ",
  " Name ":" vpn   connection   test ",
  " RemoteSubn et ":" 2 . 2 . 2 . 0 / 24 ",
  " IpsecConfi g ":{
    " IpsecLifet ime ": 86400 ,
    " IpsecAuthA lg ":" sha1 ",
    " IpsecPfs ":" group2 ",
    " IpsecEncAl g ":" aes "
  },
  " VpnGateway Id ":" vpn - bp1q8bgx4x   nkm2ogj0fi   u ",
  " EffectImme diately ": false ,
  " RequestId ":" 7DB79D0C - 5F27 - 4AB5 - 995B - 79BE55102F   90 ",
  " VpnConnect ionId ":" vco - bp10lz7aej   umd2vxogge   v ",
  " CreateTime ": 1492753817   000 ,
  " LocalSubne t ":" 1 . 1 . 1 . 0 / 24 , 1 . 1 . 2 . 0 / 24 ",
  " IkeConfig ":{
    " IkeEncAlg ":" aes ",
    " IkePfs ":" group2 ",
    " RemoteId ":" 139 . 196 . 32 . 167 ",
    " IkeAuthAlg ":" sha1 ",
    " Psk ":" pgw6dy7d1i   8in7x5 ",
    " IkeMode ":" main ",
    " IkeLifetim e ": 86400 ,
  }
```

```
" IkeVersion ":" ikev1 ",  
" LocalId ":" 116 . 62 . 69 . 64 "  
}  
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbidden. SubUser	User not authorized to operate on the specified resource as your account is created by another user.	You are not authorized to operate on this resource.
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource.
404	InvalidVpn Connection InstanceId. NotFound	The specified vpn connection instance id does not exist.	The specified VPN connection does not exist.
400	VpnGateway. Configuring	The specified service is configuring.	The specified service is been configured.
400	VpnGateway. FinancialLocked	The specified service is financial locked.	The specified service is financial locked.
400	InvalidName	The name is not valid	The name format is invalid.

[See common error codes](#)

13.23 CreateSslVpnClientCert

Creates an SSL-VPN client certificate.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreateSslVpnClientCert	The name of this action. Value: CreateSslVpnClientCert
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the VPN Gateway belongs. To query the region ID, call DescribeRegions.
SslVpnServerId	String	Yes	vss-m5et0q3iy1qex328wcujx	The ID of the SSL-VPN server to be used.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.
Name	String	No	SslVpnClientCert1	The name of the client certificate. The name must be 2 and 128 characters in length and can contain letters, numbers, periods (.), underscores (_), and hyphens (-). The name must start with a letter. It cannot start with <code>http://</code> or <code>https://</code> .

Parameter	Type	Required?	Example value	Description
OwnerAccount	String	No	test	The account of the owner of the SSL-VPN client certificate.

Response parameters

Parameter	Type	Example value	Description
Name	String	SslVpnClientCert	The name of the client certificate.
RequestId	String	079874CD-AEC1-43E6-AC03-ADD96B6E4907	The ID of the request.
SslVpnClientCertId	String	vsc-m5euof6s5jy8vs5kdz2r2	The ID of the client certificate.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=CreateSslVpnClientCertificate
&RegionId=cn-hangzhou
&SslVpnServerId=vss-m5et0q3iy1-qex328wcuja
&<CommonParameters>
```

Response example

- XML format

```
<CreateSslVpnClientCertificateResponse>
  <SslVpnClientCertId>vsc-bp1n8wcf134yl0osrcg98</SslVpnClientCertId>
  <RequestId>606998F0-B94D-48FE-8316-ACA81BB230DA</RequestId>
</CreateSslVpnClientCertificateResponse>
```

- JSON format

```
{
  "RequestId": "606998F0-B94D-48FE-8316-ACA81BB230DA",
  "SslVpnClientCertId": "vsc-bp1n8wcf134yl0osrcg98"
```

```
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbbiden. SubUser	User not authorized to operate on the specified resource as your account is created by another user.	You are not authorized to operate on this resource . Please apply for the permission and try again.
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource . For more information, open a ticket.
400	Resource. QuotaFull	The quota of resource is full	The resource quota has been reached.
400	VpnGateway. Configuring	The specified service is configuring.	The service is being configured. Please try again later.
400	VpnGateway. FinancialLocked	The specified service is financial locked.	The service has an overdue payment. Renew your account to settle the overdue payment.
400	InvalidName	The name is not valid	The name format is invalid.

[See common error codes](#)

13.24 DescribeSslVpnClientCerts

Queries SSL-VPN client certificates.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeSslVpnClientCerts	The name of this action. Value: DescribeSslVpnClientCerts
RegionId	String	Yes	cn-hangzhou	The ID of region to which the SSL-VPN client certificate belongs. To query the region ID, call DescribeRegions.
Name	String	No	cert1	The name of the SSL-VPN client certificate.
PageNumber	Integer	No	1	The number of pages to return. Default value: 1 .
PageSize	Integer	No	10	The number of rows per page. Maximum value: 50 . Default value: 10 .
SslVpnClientCertId	String	No	vsc-bp1n8wcf134yl0osrcg98	The ID of the client certificate.
SslVpnServerId	String	No	vss-bp18q7hzj6largv4vk2fe	The ID of the SSL-VPN.

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	5BE01CD7-5A50-472D-AC14-CA181C5C03BE	The ID of the request.

Parameter	Type	Example value	Description
SslVpnClientCertKeys	N/A	N/A	A list of SSL-VPN client certificates.
└─CreateTime	Long	1492747187000	The time at which the client certificate was created.
└─EndTime	Long	1494966335000	The time at which the client certificate is to expire.
└─Name	String	cert1	The name of the client certificate.
└─RegionId	String	cn-hangzhou	The region of the SSL-VPN client certificate.
└─SslVpnClientCertId	String	vsc-bp1n8wcf134yl0osrcg98	The ID of the SSL-VPN client certificate.
└─SslVpnServerId	String	vss-bp18q7hzj6largv4vk2fe	The ID of the SSL-VPN server.
└─Status	String	normal	The status of the client certificate: · expiring-soon: The certificate will expire after one week. · normal: The certificate is valid. . · expired: The certificate has expired.
TotalCount	Integer	1	The number of queried entries.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DescribeSslVpnClientCerts
&RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

- XML format

```
<DescribeSslVpnServerResponse>
```

```

< PageNumber > 1 </ PageNumber >
< TotalCount > 1 </ TotalCount >
< PageSize > 10 </ PageSize >
< SslVpnServers >
  < SslVpnServer >
    < RegionId > cn - hangzhou </ RegionId >
    < SslVpnServerId > vss - bp18q7hzj6 largv4vk2f e </
SslVpnServerId >
    < VpnGatewayId > vpn - bp1q8bgx4x nkm2ogj0fi u </
VpnGatewayId >
    < Name > test </ Name >
    < ClientIpPool > 10 . 10 . 10 . 20 / 24 </ ClientIpPool >
    < LocalSubnet > 10 . 10 . 10 . 10 / 24 </ LocalSubnet >
    < Proto > UDP </ Proto >
    < Port > 1194 </ Port >
    < Cipher > AES - 128 - CBC </ Cipher >
    < Compress > true </ Compress >
    < CreateTime > 1492753580 000 </ CreateTime >
    < Connections > 0 </ Connections >
    < MaxConnections > 5 </ MaxConnections >
    < InternetIp > 47 . 98 . xx . xx </ InternetIp >
  </ SslVpnServer >
</ SslVpnServers >
< RequestId > DF11D6F6 - E35A - 41C3 - 9B20 - 6FC8A901FE 65 </
RequestId >
</ DescribeSslVpnServerResponse >

```

• JSON format

```

{
  "DescribeSslVpnServerResponse":{
    "PageNumber":"1",
    "TotalCount":"1",
    "SslVpnServers":{
      "SslVpnServer":{
        "VpnGatewayId":"vpn - bp1q8bgx4x nkm2ogj0fi u",
        "ClientIpPool":"10 . 10 . 10 . 20 / 24",
        "Proto":"UDP",
        "Cipher":"AES - 128 - CBC",
        "InternetIp":"47 . 98 . xx . xx",
        "SslVpnServerId":"vss - bp18q7hzj6 largv4vk2f e",
        "Name":"test",
        "Port":"1194",
        "MaxConnections":"5",
        "RegionId":"cn - hangzhou",
        "CreateTime":"1492753580 000",
        "Compress":"true",
        "LocalSubnet":"10 . 10 . 10 . 10 / 24",
        "Connections":"0"
      }
    },
    "PageSize":"10",
    "RequestId":"DF11D6F6 - E35A - 41C3 - 9B20 - 6FC8A901FE 65"
  }
}

```

```
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbbiden. SubUser	User not authorized to operate on the specified resource as your account is created by another user.	You are not authorized to operate on this resource . Please apply for the permission and try again.
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource . For more information, open a ticket.

[See common error codes](#)

14 NAT Gateway

14.1 CreateNatGateway

Create a NAT Gateway.

Note the following before creating a NAT Gateway:

- A NAT Gateway and a self-hosted SNAT Gateway cannot coexist in a VPC.
- After a NAT Gateway is created, a route entry of which the destination CIDR block is 0.0.0.0/0 and the next hop is the NAT Gateway is automatically added to the route table of the VPC. This means that traffic can be routed to the NAT Gateway.
- If a route entry of which the destination CIDR block is 0.0.0.0/0 already exists in the route table of the VPC, you need to delete the router entry. Otherwise, the NAT Gateway cannot be created.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs. API Explorer can help reduce possible difficulty with using cloud APIs. We recommend that you use API Explorer.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreateNatGateway	The action to perform. Valid value: CreateNatGateway
RegionId	String	Yes	cn-hangzhou	The region to which the NAT Gateway belongs. To obtain the region ID, call DescribeRegions.
VpcId	String	Yes	vpc-bp1di7uewzmtvfug8ufpv	The ID of the VPC to be used.

Parameter	Type	Required?	Example value	Description
BandwidthPackage.n.Bandwidth	String	No	5	The bandwidth of the NAT bandwidth package (n). Valid value: [5,5000]  Note: This API can be called only if you purchased a NAT bandwidth package before January 26, 2018. If your account does not have a NAT bandwidth package purchased before January 26, 2018, you need to attach an EIP.
BandwidthPackage.N.ISP	String	No	BGP	The ISP type of the shared bandwidth package (n). Default value: BGP (multiple lines).
BandwidthPackage.n.IpCount	String	No	5	The number of public IP addresses in the shared bandwidth package. Valid value: [1,50]. n represents the n-th bandwidth package. Valid values: [1,4].  Note: This API can be called only if you purchased a NAT bandwidth package before January 26, 2018. If your account did not include a NAT bandwidth package before January 26, 2018, attach an EIP.

Parameter	Type	Required?	Example value	Description
BandwidthPackage.N.Zone	String	No	cn-hangzhou-b	The zone of the shared bandwidth package (n). The system randomly allocates a zone if this parameter is not specified. If the NAT bandwidth package and the backend ECS instance are not in the same zone, the latency of the connection between them is unchanged; if they are in the same zone, the latency can be reduced.  Note: This API can be called only if you purchased a NAT bandwidth package before January 26, 2018. If your account does not have a NAT bandwidth package before January 26, 2018, you need to attach an EIP.
ClientToken	String	No	shefffxddjehfh123	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It cannot exceed 64 ASCII characters.

Parameter	Type	Required?	Example value	Description
Description	String	No	testnat	The description of the NAT Gateway. The description must be 2 to 256 characters in length. It cannot start with <code>http://</code> or <code>https://</code>.
Name	String	No	fortest	The name of the NAT Gateway. The name must be 2 and 128 characters in length. It can contain letters, numbers, periods (.), underscores (_), and hyphens (-). The name must start with a letter. It cannot start with <code>http://</code> or <code>https://</code>. If this parameter is not specified, the gateway ID is used by default.
Spec	String	No	small	The specification of the NAT Gateway. Valid values: - Small (default): small - Middle : medium - Large : large - Xlarge . 1 : super large

Response parameters

Parameter	Type	Example value	Description
NatGatewayId	String	ngw-112za33e4	The ID of the NAT Gateway. The ID is generated by the system and is globally unique.
ForwardTableIds		ftb-11tc6xgmv	A list of forwarding tables.
BandwidthPackageIds		bwp-11odxu2k7	A list of shared bandwidth packages.
RequestId	String	2315DEB7-5E92-423A-91F7-4C1EC9AD97C3	The ID of the request.
SnatTableIds		stb-SnatTableIds	The ID of the SNAT table.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=CreateNatGateway
&RegionId=cn-hangzhou
&VpcId=vpc-bp1di7uewz-mtvfuq8ufp-v
&<CommonParameters>
```

Response example

• XML format

```
<CreateNatGatewayResponse>
  <BandwidthPackageIds>bwp-*****</BandwidthPackageIds>
  <forwardTableIds>ftb-*****</forwardTableIds>
  <natGatewayId>ngw-*****</natGatewayId>
  <snatTableIds>stb-*****</snatTableIds>
  <RequestId>E43E51F2-344F-4685-8DF5-30EB298CFA81</RequestId>
</CreateNatGatewayResponse>
```

• JSON format

```
{
  "BandwidthPackageIds": [
    "bwp-*****"
  ],
  "snatTableIds": [
    "stb-*****"
  ]
}
```

```

],
" natGateway Id ":" ngw -*****",
" RequestId ":" E43E51F2 - 344F - 4685 - 8DF5 - 30EB298CFA 81 ",
" forwardTab leIds ":"[
" ftb -*****"
]
}

```

Error codes

HTTP code	Error code	Error message	Description
400	InvalidVPCStatus	vpc incorrect status.	The VPC status is invalid.
404	InvalidRegionId. NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
400	MissingParameter. BandwidthPackage	only support one BandwidthPackage be created with NatGateway.	At least one shared bandwidth package must be specified.
400	MissingParameter	Miss mandatory parameter.	Required parameters are missing.
404	InvalidZoneId. NotFound	Specified value of ZoneId is not exists.	The specified zone does not exist.
404	InvalidZoneId. NotFound	Can not find ZoneId for allocated ip.	The zone of the IP address is incorrect.
400	QuotaExceeded. BandwidthPackageIps	The specified ipCount exceeded quota.	The IP address quota has been reached. To increase the quota, open a ticket.
400	InvalidParameter.Name. Malformed	The specified Name is not valid.	The specified name is invalid.
400	InvalidParameter. Description. Malformed	The specified Description is not valid.	The specified description is invalid.
400	ZONE_NO_AVAILABLE_IP	The Zone have no available ip.	There are no available IP addresses in this zone.

HTTP code	Error code	Error message	Description
400	InvalidParameter.BandwidthPackage.n.ISP.ValueNotSupport	The specified ISP of BandwidthPackage is not valid.	The ISP of the shared bandwidth package is invalid.
400	InvalidNatGatewayId.NotFound	The NatGatewayId not exist.	The specified NatGatewayId is invalid.
400	VswitchStatusError	The VSwitch is creating .	The VSwitch is being created.
400	VpcStatusError	The Vpc is creating .	The VPC is being created.
400	InvalidParameter.Spec.ValueNotSupported	The specified Spec is not valid.	The specification is invalid.

[View the error codes of the product](#)

14.2 ModifyNatGatewayAttribute

Modifies the name and description of a NAT Gateway.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ModifyNatGatewayAttribute	The name of this action. Value: ModifyNatGatewayAttribute
NatGatewayId	String	Yes	ngw-xxoo123	The ID of the NAT Gateway.

Parameter	Type	Required?	Example value	Description
RegionId	String	Yes	cn-hangzhou	The region to which the NAT Gateway belongs. To query the region ID, call DescribeRegions.
Description	String	No	fortest	The description of the NAT Gateway. The description must be 2 to 256 characters in length. It must start with a letter. It cannot start with <code>http://</code> or <code>https://</code> .
Name	String	No	nat123	The name of the NAT Gateway. The name must be 2 to 128 characters in length and can contain letters, numbers, periods (.), underscores (_), or hyphens (-). The name must start with a letter. It cannot start with <code>http://</code> or <code>https://</code> .

Response parameters

Parameter	Type	Example value	Description
RequestId	String	AB5F62CF-2B60-4458-A756-42C9DFE108D1	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=ModifyNatGatewayAttribute
&NatGatewayId=ngw-xxoo123
&RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

- XML format

```
<ModifyNatGatewayAttributeResponse>
  <RequestId>2315DEB7-5E92-423A-91F7-4C1EC9AD97C3</RequestId>
</ModifyNatGatewayAttributeResponse>
```

- JSON format

```
{
  "RequestId": "2315DEB7-5E92-423A-91F7-4C1EC9AD97C3"
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
404	InvalidNatGatewayId.NotFound	The specified NatGatewayId does not exist in our records.	The specified NatGatewayId does not exist.
400	InvalidParameter.Name.Malformed	The specified Name is not valid.	The name is invalid.
400	InvalidParameter.Description.Malformed	The specified Description is not valid.	The description is invalid.

[See common error codes](#)

14.3 ModifyNatGatewaySpec

Modifies the specification of a NAT Gateway.

The NAT Gateway is billed according to the largest specification used in a day.

A NAT Gateway specification determines the performance metrics (Max Connections and Connections Per Second) of SNAT, but does not relate to data throughput.

The relationship between a NAT Gateway specification and its corresponding performance metrics is as follows:

Specification	Max Connections	Connections Per Second (CPS)
Small	10 thousand	1 thousand
Medium	50,000	5,000
Large	200,000	10,000

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK example codes, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ModifyNatGatewaySpec	The action to perform. Valid value: ModifyNatGatewaySpec
NatGatewayId	String	Yes	ngw-bp1uewa15k4iy5770ya89	The ID of the NAT Gateway.
RegionId	String	Yes	cn-hangzhou	The region to which the NAT Gateway belongs. To query the region ID, call DescribeRegions.

Parameter	Type	Required?	Example value	Description
Spec	String	Yes	Small	The specification of the NAT Gateway. Valid values: - Small (default value): small - Middle : medium - Large : large
ClientToken	String	No	SHA234js121223xxxxx	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It cannot exceed 64 ASCII characters.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	DBD4E4A2-786E-4BD2-8EB6-107FFC2B5B7D	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=ModifyNatGatewaySpec&NatGatewayId=ngw-bp1uewa15k4iy5770ya89&RegionId=cn-hangzhou&Spec=Small&<CommonParameters>
```

Response example

• XML format

```
<ModifyNatGatewaySpecResponse>
  <RequestId>DBD4E4A2-786E-4BD2-8EB6-107FFC2B5B7D</RequestId>
```

```
</ ModifyNatGatewaySpec Response >
```

- JSON format

```
{
  "RequestId ":" DBD4E4A2 - 786E - 4BD2 - 8EB6 - 107FFC2B5B 7D "
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
404	InvalidNatGatewayId.NotFound	The specified NatGatewayId does not exist in our records.	The specified NatGatewayId does not exist.
400	NATGW_MODIFY_SPEC_SAME	The specified Spec is same with now.	The specification you entered is the same as the current specification.
400	InvalidParameter.Spec.ValueNotSupported	The specified Spec is not valid.	The specification is invalid.

[See common error codes](#)

14.4 CreateBandwidthPackage

Creates a NAT bandwidth package.

A NAT Gateway package includes a group of public IP addresses and a shared bandwidth. You can create up to four NAT bandwidth packages for a NAT Gateway.

A NAT bandwidth package includes:

- A shared bandwidth
- A group of public IP addresses



Note:

This API can be called only if you purchased a NAT bandwidth package before January 26, 2018. If your account does not have a NAT bandwidth package purchased before January 26, 2018, you need to attach an EIP.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreateBandwidthPackage	The name of this action. Value: CreateBandwidthPackage
Bandwidth	Integer	Yes	5	The bandwidth of the NAT bandwidth package. Value range: 5 to 1000.
IpCount	Integer	Yes	2	The number of public IP addresses in the NAT bandwidth package. Value range: 1 to 50.
NatGatewayId	String	Yes	ngw-7mwb327j1	The ID of the NAT Gateway to be used.
RegionId	String	Yes	cn-hangzhou	The region to which the NAT Gateway belongs. To query the region ID, call DescribeRegions.

Parameter	Type	Required?	Example value	Description
ClientToken	String	No	she11234556664566	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.
Description	String	No	The description of the bandwidth package	The description of the NAT bandwidth package. The description must be 2 to 256 characters in length. The description must start with a letter. It cannot start with <code>http://</code> or <code>https://</code>.
ISP	String	No	BGP	Valid value: BGP.
InternetChargeType	String	No	PayByBandwidth	The Internet billing method. Valid values: PayByTraffic: Billing based on traffic
Name	String	No	The name of the bandwidth package	The name of the NAT bandwidth package. The name must be 2 to 128 characters in length and can letters, numbers, underscores (_), and hyphens (-). The name must start with a letter, but cannot start with <code>http://</code> or <code>https://</code>.

Parameter	Type	Required?	Example value	Description
Zone	String	No	cn-shanghai-a	The zone of the NAT bandwidth package. If this parameter is not specified, the system randomly allocates a zone.  Note: If the NAT bandwidth package and the backend ECS instance are not in the same zone, the latency of the connection between them is unchanged; if they are in the same zone, the latency of the connection between them can be reduced.

Response parameters

Parameter	Type	Example value	Description
BandwidthPackageId	String	bwp-s6lmtmkk	The ID of the NAT bandwidth package.
RequestId	String	54ED4074-3F89-4F11-B166-837DD3E20FE3	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=CreateBandwidthPackage
&Bandwidth=5
&IpCount=2
&NatGatewayId=ngw-7mwb327j1
&RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

- XML format

```
< CreateBandwidthPackageResponse >
  < RequestId > 2315DEB7 - 5E92 - 423A - 91F7 - 4C1EC9AD97 C3 </
  RequestId >
  < BandwidthPackageId > bwp - s6lmtmkk </ BandwidthPackageId >
</ CreateBandwidthPackageResponse >
```

- JSON format

```
{
  "BandwidthPackageId": "bwp - s6lmtmkk",
  "RequestId": "54ED4074 - 3F89 - 4F11 - B166 - 837DD3E20F E3"
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
400	MissingParameter	Missing mandatory parameter.	The required parameters are missing.
404	InvalidZoneId.NotFound	Specified value of ZoneId is not exists.	The specified zone does not exist.
404	InvalidZoneId.NotFound	Can not find ZoneId for allocated ip.	The specified zone of the IP address is incorrect.
400	QuotaExceeded.BandwidthPackageIps	The specified ipCount exceeded quota.	The quota of IP addresses has been reached. To increase the quota, open a ticket.
400	QuotaExceeded.BandwidthPackageCountOnNatGateway	BandwidthPackage count limit on one NatGateway exceeded.	The quota of shared bandwidth packages has been reached. You can create up to four shared bandwidth packages for a NAT Gateway.
400	InvalidParameter.Name.Malformed	The specified Name is not valid.	The name is invalid.

HTTP status code	Error code	Error message	Description
400	InvalidParameter.Description.Malformed	The specified Description is not valid.	The description is invalid.
400	InvalidParameter.BandwidthPackage.n.ISP.ValueNotSupport	The specified ISP of BandwidthPackage is not valid.	The ISP of the shared bandwidth package is invalid.
400	ZONE_NO_AVAILABLE_IP	The Zone have no available ip.	There are no available IP addresses in this zone.
404	NATGW_NOT_EXIST	The NatGateway not exist.	The specified NAT Gateway does not exist.

[See common error codes](#)

14.5 DescribeBandwidthPackages

Queries one or more NAT bandwidth packages in a region.



Note:

This API can be called only if you purchased a NAT bandwidth package before January 26, 2018. If your account does not have a NAT bandwidth package purchased before January 26, 2018, you need to associate an EIP.

For more information, see [AssociateEipAddress](#).

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeBandwidthPackages	The name of this action. Value: DescribeBandwidthPackages
RegionId	String	Yes	cn-hangzhou	The region to which the NAT Gateway belongs. To query the region ID, call DescribeRegions.
BandwidthPackageId	String	No	bwp-bp1xea10o8qxb8lkx2xa1	The ID of the NAT bandwidth package.
NatGatewayId	String	No	ngw-bp1uewa15k4iy5770ya89	The ID of the NAT Gateway.
PageNumber	Integer	No	10	The number of pages to return. Default value: 1 .
PageSize	Integer	No	10	The number of rows per page. Maximum value: 50 . Default value: 10 .

Response parameters

Parameter	Type	Example value	Description
BandwidthPackages	N/A	N/A	A list of NAT bandwidth packages.
└Bandwidth	String	5	The bandwidth value in Mbps. Valid values: 5 to 5000.
└BandwidthPackageId	String	bwp-xxoo123	The ID of the NAT bandwidth package.

Parameter	Type	Example value	Description
<code>BusinessStatus</code>	String	Normal	The status of the bandwidth package. Valid values: Normal FinancialLocked SecurityLocked.
<code>CreationTime</code>	String	2017-06-08T12:20:55	The time at which the bandwidth package was created. Standard: ISO861. Format: UTC, YYYY-MM-DDThh:mmZ
<code>Description</code>	String	test123	The description of the bandwidth package.
<code>ISP</code>	String	BGP	Valid value: BGP.
<code>InstanceChargeType</code>	String	PostPaid	The billing method of the instance. Currently, only the Pay-As-You-Go billing method is supported. Valid value: PostPaid
<code>InternetChargeType</code>	String	PayByBandwidth	The Internet billing method. Valid values: · PayByTraffic: Billing based on traffic
<code>IpCount</code>	String	1	The number of public IP addresses in the NAT bandwidth package. Value range: 1 to 50.
<code>Name</code>	String	xxxxxxx	The name of the NAT Gateway.
<code>NatGatewayId</code>	String	ngw-xxoo123	The ID of the NAT Gateway.

Parameter	Type	Example value	Description
PublicIpAddresses	N/A	N/A	The IP addresses in the bandwidth package.
AllocationId	String	eip-2zeerraiwb7uj6i0d0fo3	The allocation ID.
ApAccessEnabled	Boolean	true	Indicates whether AP access is enabled.
IpAddress	String	116.62.222.28	The IP address.
UsingStatus	String	Available	The usage status.
RegionId	String	cn-hangzhou	The region ID.
Status	String	Available	The status of the bandwidth package.
ZoneId	String	cn-shanghai-a	The zone of the NAT bandwidth package.
TotalCount	Integer	10	The number of queried entries.
PageNumber	Integer	10	The current page number.
PageSize	Integer	10	The number of entries per page.
RequestId	String	4EC47282-1B74-4534-BD0E-403F3EE64CAF"	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DescribeBandwidthPackets
&RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

· XML format

```
< DescribeBandwidthPackagesResponse >
  < PageNumber > 1 </ PageNumber >
  < TotalCount > 1 </ TotalCount >
  < BandwidthPackages >
    < BandwidthPackage >
      < Description />
      < IpCount > 2 </ IpCount >
      < ISP > BGP </ ISP >
      < ZoneId > cn - hangzhou - b </ ZoneId >
      < InternetChargeType > PayByTraffic </ InternetChargeType >
      < NatGatewayId > ngw - bp1uewa15k4iy5770ya89 </ NatGatewayId >
      < Name />
      < CreationTime > 2018 - 03 - 06T07 : 33 : 51Z </ CreationTime >
      < Status > Available </ Status >
      < BandwidthPackageId > bwp - bp1xea10o8qwx8lkwx2xa1 </ BandwidthPackageId >
      < BusinessStatus > Normal </ BusinessStatus >
      < RegionId > cn - hangzhou </ RegionId >
      < InstanceChargeType > PostPaid </ InstanceChargeType >
      < PublicIpAddresses >
        < PublicIpAddress >
          < IpAddress > 118 . 31 . xx . xx </ IpAddress >
          < AllocationId > nateip - bp1jbluijvm9o8z30ejqp </ AllocationId >
          < UsingStatus > Idle </ UsingStatus >
        </ PublicIpAddress >
        < PublicIpAddress >
          < IpAddress > 118 . 31 . xx . xx </ IpAddress >
          < AllocationId > nateip - bp1dt4hpe8847yj4oh10w </ AllocationId >
          < UsingStatus > UsedBySnatTable </ UsingStatus >
        </ PublicIpAddress >
      </ PublicIpAddresses >
      < Bandwidth > 5 </ Bandwidth >
    </ BandwidthPackage >
  </ BandwidthPackages >
  < PageSize > 10 </ PageSize >
</ DescribeBandwidthPackagesResponse >
```

· JSON format

```
{
  "PageNumber": 1,
  "TotalCount": 1,
  "BandwidthPackages": {
    "BandwidthPackage": [
      {
        "Description": "",
        "IpCount": "2",
        "ISP": "BGP",
        "ZoneId": "cn - hangzhou - b",
        "InternetChargeType": "PayByTraffic",
        "NatGatewayId": "ngw - bp1uewa15k4iy5770ya89",
        "Name": "",
        "CreationTime": "2018 - 03 - 06T07 : 33 : 51Z",
        "Status": "Available",

```

```

    " BandwidthPackageId ":" bwp - bp1xea10o8 qxw8lkwx2xa 1 ",
    " BusinessStatus ":" Normal ",
    " RegionId ":" cn - hangzhou ",
    " InstanceChargeType ":" PostPaid ",
    " PublicIpAddresses ": {
      " PublicIpAddresses ": [
        {
          " IpAddress ":" 118 . 31 . xx . xx ",
          " AllocationId ":" nateip - bp1jbluijv m9o8z30ejq p ",
          " UsingStatus ":" Idle "
        },
        {
          " IpAddress ":" 118 . 31 . xx . xx ",
          " AllocationId ":" nateip - bp1dt4hpe8 847yj4oh10 w ",
          " UsingStatus ":" UsedBySnat Table "
        }
      ]
    },
    " Bandwidth ":" 5 "
  }
},
" PageSize ": 10 ,
" RequestId ":" 8909013D - 4A64 - 41A6 - 93E6 - E3FD08A3EA FE "
}

```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.

[See common error codes](#)

14.6 ModifyBandwidthPackageSpec

Modifies the bandwidth of a NAT bandwidth package.



Note:

This API can be called only if you purchased a NAT bandwidth package before January 26, 2018. If your account does not have a NAT bandwidth package purchased before January 26, 2018, you need to associate an EIP.

[AssociateEipAddress](#) .

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ModifyBandwidthPackageSpec	The name of this action. Value: ModifyBandwidthPackageSpec
BandWidth	Integer	Yes	5	The bandwidth of the NAT bandwidth package. Value range: 5 to 1000.
BandwidthPackageId	String	Yes	bwp-s6lmtmkk	The ID of the NAT bandwidth package.
RegionId	String	Yes	cn-hangzhou	The region to which the NAT bandwidth package belongs. To query the region ID, call DescribeRegions.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	079874CD-AEC1-43E6-AC03-ADD96B6E4907	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=ModifyBandwidthPackageSpec
&Bandwidth=5
&BandwidthPackageId=bwp-s6lmtmkkxxxxxx
&RegionId=cn-hangzhou
```

&< CommonParameters >

Response example

- XML format

```
< ModifyBandwidthPackageSpecResponse >
  < RequestId > 2315DEB7 - 5E92 - 423A - 91F7 - 4C1EC9AD97 C3 </
  RequestId >
</ ModifyBandwidthPackageSpecResponse >
```

- JSON format

```
{
  "RequestId": "54ED4074 - 3F89 - 4F11 - B166 - 837DD3E20F E3 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
404	InvalidBandwidth.ValueNotSupported	The specified value of Bandwidth not supported.	The specified peak bandwidth is not supported.
404	BandwidthPackage.FinancialLocked	The specified BandwidthPackage has been Financial Lock.	The specified bandwidth package is locked due to insufficient account balance.

[See common error codes](#)

14.7 ModifyBandwidthPackageAttribute

Modifies the name and description of a NAT bandwidth package.



Note:

This API can be called only if you purchased a NAT bandwidth package before January 26, 2018. If your account does not have a NAT bandwidth package purchased

before January 26, 2018, you need to associate an EIP. For more information, see [AssociateEipAddress](#).

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ModifyBandwidthPackageAttribute	The name of the action. Value: <code>ModifyBandwidthPackageAttribute</code>
BandwidthPackageId	String	Yes	bwp-s6lmotmkk	The ID of the NAT bandwidth package.
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the NAT bandwidth package belongs. To query the region ID, call <code>DescribeRegions</code> .
Description	String	No	xxxxxxxxx	The description of the NAT bandwidth package. The description must be 2 to 256 characters in length. It must start with a letter. It cannot start with <code>http://</code> or <code>https://</code> .

Parameter	Type	Required?	Example value	Description
Name	String	No	NAT bandwidth package	The name of the NAT 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. It cannot start with <code>http://</code> or <code>https://</code>.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	DFDDD35D-3F29-4E15-AA28-53F5341F9599	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=ModifyBandwidthPackageAttribute
&BandwidthPackageId=bwp-s6lmtmkkx-xxxxxxx
&RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

• XML format

```
<ModifyBandwidthPackageAttributeResponse>
  <RequestId>2315DEB7-5E92-423A-91F7-4C1EC9AD97C3</RequestId>
</ModifyBandwidthPackageAttributeResponse>
```

• JSON format

```
{
```

```
" RequestId ":" 54ED4074 - 3F89 - 4F11 - B166 - 837DD3E20F E3 "  
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
404	InvalidBandwidthPackageId.NotFound	The specified bandwidthPackageId does not exist in our records.	The specified shared bandwidth package does not exist.
400	InvalidParameter.Name.Malformed	The specified Name is not valid.	The specified name is invalid.
400	InvalidParameter.Description.Malformed	The specified Description is not valid.	The specified description is invalid.

[See common errors](#)

14.8 DescribeNatGateways

Queries one or more NAT Gateways in a region.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeNatGateways	The name of the action. Valid value: DescribeNatGateways

Parameter	Type	Required ?	Example value	Description
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the NAT Gateway belongs. To query the region ID, call DescribeRegions.
Name	String	No	The name of the NAT Gateway	The name of the NAT Gateway.
NatGatewayId	String	No	ngw-bp1uewa15k4iy5770ya89	The ID of the NAT Gateway.
PageNumber	Integer	No	10	The number of pages to return. Default value: 1 .
PageSize	Integer	No	1	The number of entries per page. Maximum value: 50 . Default value: 10 .
VpcId	String	No	vpc-bp15zckdt37pq72zvw3	The ID of the VPC.

Response parameters

Parameter	Type	Example value	Description
NatGateways	N/A	N/A	A list of NAT Gateways.

Parameter	Type	Example value	Description
<code>└AutoPay</code>	Boolean	true	Indicates whether automatic payment is enabled. Valid values: · false: Automatic payment is not enabled. After an order is generated, you need to go to the order center to complete the payment. · true: Automatic payment is enabled.  Note: This parameter is required when the InstanceChargeType value is PrePaid.
<code>└BandwidthPackageIds</code>	N/A	bwp-s6lmotmkk	The IDs of the bandwidth packages attached to the NAT Gateway.
<code>└BusinessStatus</code>	String	Normal	The status of the NAT Gateway: · Normal: Normal · FinancialLocked: Locked due to insufficient account balance · SecurityLocked: Locked due to security reasons
<code>└CreationTime</code>	String	2017-06-08T12:20:55	The time at which the NAT Gateway was created. Standard: ISO8601. Format: YYYY-MM-DDThh:mmZ
<code>└Description</code>	String	NAT	The description of the NAT Gateway.
<code>└ExpiredTime</code>	String	2017-08-26T16:00Z	The time at which the NAT Gateway is to expire.
<code>└ForwardTableIds</code>	N/A	ftb-uf6gj3mhsg94qsqstfqsx	The IDs of port forwarding tables.

Parameter	Type	Example value	Description
<code>InstanceChargeType</code>	String	PostPaid	The billing method of the instance . Currently, only the Pay-As-You-Go billing method is supported. Valid value: PostPaid: Pay-As-You-Go
<code>IpLists</code>			The EIPs attached to the NAT Gateway.
<code>IpAddress</code>	String	116.62.222.28	The IP address of the EIP.
<code>Name</code>	String	The name of the instance	The name of the NAT Gateway.
<code>NatGatewayId</code>	String	ngw-bp1047e2d4z7kf2kiy25t	The ID of the NAT Gateway.
<code>RegionId</code>	String	cn-hangzhou	The ID of the region to which the NAT Gateway belongs.
<code>SnatTableIds</code>		stb-uf6dalcd0krz423pv8mq	The ID of the SNAT table of the NAT Gateway.
<code>Spec</code>	String	Small	The specification of the NAT Gateway.
<code>Status</code>	String	Initiating	The status of the NAT Gateway. Valid values: - Initiating: initiating - Available: available - Pending: being configured
<code>VpcId</code>	String	vpc-bp15zckdt37pq72zvw3	The ID of the VPC.
<code>TotalCount</code>	Integer	10	The number of queried entries.
<code>PageNumber</code>	Integer	10	The current page number.

Parameter	Type	Example value	Description
PageSize	Integer	10	The number of entries per page.
RequestId	String	4EC47282-1B74-4534-BD0E-403F3EE64CAF	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DescribeNatGateways
&RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

• XML format

```
<DescribeNatGatewaysResponse>
  <PageNumber>1</PageNumber>
  <TotalCount>1</TotalCount>
  <PageSize>10</PageSize>
  <RequestId>1207C80C-7CAB-4874-A9A0-D19EC9F35490</RequestId>
  <NatGatewayList>
    <NatGateway>
      <Description></Description>
      <Spec>Small</Spec>
      <IpLists>
        <IpList>
          <IpAddress>118.31.65.181</IpAddress>
          <AllocationId>eip-bp1xyg5ipm-h3nledxywx-f</AllocationId>
          <UsingStatus>UsedBySnatTable</UsingStatus>
        </IpList>
        <IpList>
          <IpAddress>47.97.187.34</IpAddress>
          <AllocationId>eip-bp19eue77u-20cffjcu4e-a</AllocationId>
          <UsingStatus>UsedByForwardTable</UsingStatus>
        </IpList>
      </IpLists>
      <ForwardTableIds>
        <ForwardTableId>ftb-bp15o9aylj-19vfvgtznzoy</ForwardTableId>
      </ForwardTableIds>
      <VpcId>vpc-bp15k6sx6f-hdz2jw4daz-0</VpcId>
      <NatGatewayId>ngw-bp1047e2d4-z7kf2kiy25-t</NatGatewayId>
      <CreationTime>2018-01-10T09:48:29Z</CreationTime>
      <BandwidthPackageIds></BandwidthPackageIds>
      <Name></Name>
      <Status>Available</Status>
      <BusinessStatus>Normal</BusinessStatus>
    </NatGateway>
  </NatGatewayList>
</DescribeNatGatewaysResponse>
```

```

    < RegionId > cn - hangzhou </ RegionId >
    < SnatTableIds >
      < SnatTableId > stb - bp1tyr0o48 w6wymur4gv n </
SnatTableId >
    </ SnatTableIds >
    < InstanceChargeType > PostPaid </ InstanceChargeType >
  </ NatGateway >
</ NatGateway >
</ DescribeNatGatewaysResponse >

```

• JSON format

```

{
  "PageNumber": 1,
  "TotalCount": 1,
  "PageSize": 10,
  "RequestId": "1207C80C - 7CAB - 4874 - A9A0 - D19EC9F354 90",
  "NatGateway": {
    "NatGateway": [
      {
        "Description": "",
        "Spec": "Small",
        "IpLists": {
          "IpList": [
            {
              "IpAddress": "118 . 31 . 65 . 181",
              "AllocationId": "eip - bp1xyg5ipm h3nledxywx f",
              "UsingStatus": "UsedBySnatTable"
            },
            {
              "IpAddress": "47 . 97 . 187 . 34",
              "AllocationId": "eip - bp19eue77u 20cffjcu4e a",
              "UsingStatus": "UsedByForwardTable"
            }
          ]
        },
        "ForwardTableIds": {
          "ForwardTableId": [
            "ftb - bp15o9aylj 19vfvgtznzy"
          ]
        },
        "VpcId": "vpc - bp15k6sx6f hdz2jw4daz 0",
        "NatGatewayId": "ngw - bp1047e2d4 z7kf2kiy25 t",
        "CreationTime": "2018 - 01 - 10T09 : 48 : 29Z",
        "BandwidthPackageIds": {
          "BandwidthPackageId": []
        },
        "Name": "",
        "Status": "Available",
        "BusinessStatus": "Normal",
        "RegionId": "cn - hangzhou",
        "SnatTableIds": {
          "SnatTableId": [
            "stb - bp1tyr0o48 w6wymur4gv n"
          ]
        },
        "InstanceChargeType": "PostPaid"
      }
    ]
  }
}

```

```
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.

[See common error codes](#)

14.9 AddBandwidthPackageIps

Adds public IP addresses to a NAT bandwidth package.



Note:

This API can be called only if you purchased a NAT bandwidth package before January 26, 2018. If your account does not have a NAT bandwidth package purchased before January 26, 2018, you need to associate an EIP.

For more information, see [AssociateEipAddress](#).

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	AddBandwidthPackageIps	The name of this action. Value: AddBandwidthPackageIps
BandwidthPackageId	String	Yes	bwp-s6lmotmkk	The ID of the NAT bandwidth package.

Parameter	Type	Required?	Example value	Description
IpCount	String	Yes	2	The number of public IP addresses in the NAT bandwidth package. Value range: 1 to 50.
RegionId	String	Yes	cn-hangzhou	The region to which the NAT bandwidth package belongs. To query the region ID, call DescribeRegions.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	EC0B5C51-7F40-44D6-A642-1DE764B547EC	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=AddBandwidthPackageIps
&BandwidthPackageId=bwp-s6lmtmkk
&IpCount=2
&RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

- XML format

```
< AddBandwidthPackageResponse >
  < RequestId > 2315DEB7 - 5E92 - 423A - 91F7 - 4C1EC9AD97 C3 </
  RequestId >
</ AddBandwidthPackageResponse >
```

- JSON format

```
{
  "RequestId": "2315DEB7 - 5E92 - 423A - 91F7 - 4C1EC9AD97 C3"
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
400	InvalidIpCount.ValueNotSupported	The specified value of IpCount not supported.	The IpCount value is invalid.
400	QuotaExceeded.BandwidthPackageIps	The specified ipCount exceeded quota.	The quota of IP addresses has been reached. To increase the quota, open a ticket.
404	BandwidthPackage.FinancialLocked	The specified BandwidthPackage has been FinancialLock.	The bandwidth package is locked due to insufficient account balance.

[See common error codes](#)

14.10 RemoveBandwidthPackageIps

Removes public IP addresses from a NAT bandwidth package.

Before you call RemoveBandwidthPackageIps to delete public IP addresses, note the following:

- You cannot delete all public IP addresses in the NAT bandwidth package.
- You cannot delete an IP address that is not included in the target NAT bandwidth package.

- You cannot delete an IP address occupied by a DNAT entry or SNAT entry.

**Note:**

This API can be called only if you purchased a NAT bandwidth package before January 26, 2018. If your account does not have a NAT bandwidth package purchased before January 26, 2018, you need to associate an EIP.

For more information, see [AssociateEipAddress](#).

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	RemoveBandwidthPackageIps	The name of the action. Value: RemoveBandwidthPackageIps
BandwidthPackageId	String	Yes	bwp-s6lmtmkk	The ID of the NAT bandwidth package.
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the NAT bandwidth package belongs. To query the region ID, call DescribeRegions.
RemovedIpAddresses	String	Yes	116.62.222.28	The ID of the public IP address to be deleted. Value range of n: 1 to 20.

Parameter	Type	Required?	Example value	Description
ClientToken	String	No	SHAww112344jhsW233	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It cannot exceed 64 ASCII characters.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	7D275A59-1EB0-4775-8A20-2A47055EAC5C	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=RemoveBandwidthPackageIps
&BandwidthPackageId=bwp-s6lmotmkk
&RegionId=cn-hangzhou
&RemovedIpAddresses.1=116.62.222.28
&<CommonParameters>
```

Response example

- XML format

```
<RemoveBandwidthPackageIpsResponse>
  <RequestId>7D275A59-1EB0-4775-8A20-2A47055EAC5C</RequestId>
</RemoveBandwidthPackageIpsResponse>
```

- JSON format

```
{
  "RequestId": "7D275A59-1EB0-4775-8A20-2A47055EAC5C"
```

}

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
404	invalidRemovedIpAddresses.NotFound	Some of the specified value of RemovedIpAddress not found in specified BandwidthPackage.	Some IP addresses in the IP address list are not in the shared bandwidth package. Check these IP addresses.
400	InvalidIpCount.ValueNotSupported	Can not remove all ips of the bandwidthPackage.	You cannot remove all IP addresses in the bandwidth package.
400	InvalidRemovedIpAddresses.NotFound	Some of remove ip is not natPublicIp.	Some specified IP addresses are not public IP addresses of the NAT Gateway and cannot be removed.
400	DependencyViolation.ForwardEntry	The ip has been used by ForwardEntry.	The IP address is being used by a forwarding rule . Delete the rule first.
400	DependencyViolation.SnatEntry	The ip has been used by SnatEntry.	The IP address is being used by an SNAT rule. Delete the rule first.
404	BandwidthPackage.FinancialLocked	The specified BandwidthPackage has been FinancialLock.	The bandwidth package is locked due to insufficient balance.

[See common error codes](#)

14.11 DeleteBandwidthPackage

Deletes a NAT bandwidth package.



Note:

This API can be called only if you purchased a NAT bandwidth package before January 26, 2018. If your account does not have a NAT bandwidth package purchased before January 26, 2018, you need to associate an EIP. For more information, see [AssociateEipAddress](#).

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteBandwidthPackage	The name of this action. Value: DeleteBandwidthPackage
BandwidthPackageId	String	Yes	bwp-bp1arsrmca9kp7inuc3a1	The ID of the NAT bandwidth package.
RegionId	String	Yes	cn-hangzhou	The region to which the NAT Gateway belongs. To query the region ID, call DescribeRegions.
Force	Boolean	No	false	Indicates whether to forcibly delete the NAT bandwidth package.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	7D275A59-1EB0-4775-8A20-2A47055EAC5C	The ID of the request.

Examples

Request example

```
https :// vpc . aliyuncs . com /? Action = DeleteBand widthPacka
ge
& BandwidthP ackageId = bwp - bp1arsrmca 9kpxxxxxxx x
& RegionId = cn - hangzhou
&< CommonPara meters >
```

Response example

- XML format

```
< DeleteBand widthPacka geResponse >
  < RequestId > 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 </
  RequestId >
</ DeleteBand widthPacka geResponse >
```

- JSON format

```
{
  " RequestId ":" 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
400	Dependency Violation.ForwardEntry	The specified BandwidthP ackageId has dependent resource.	The specified shared bandwidth package is associated with an SNAT /DNAT entry. Delete the SNAT/DNAT entry first.
400	Dependency Violation.SnatEntry	The specified BandwidthP ackageId has dependent resource.	The specified shared bandwidth package is associated with an SNAT /DNAT entry. Delete the SNAT/DNAT entry first.

[See common error codes](#)

14.12 DeleteNatGateway

Deletes a NAT Gateway.



Note:

If the NAT Gateway is associated with a shared bandwidth package, you must delete the shared bandwidth package first.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteNatGateway	The name of this action. Value: DeleteNatGateway
NatGatewayId	String	Yes	ngw-bp1uewa15k4iy5770ya89	The ID of the NAT Gateway.
RegionId	String	Yes	cn-hangzhou	The region to which the NAT Gateway belongs. To query the region ID, call DescribeRegions.
Force	Boolean	No	false	Indicates whether to forcibly delete the NAT Gateway.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	4EC47282-1B74-4534-BD0E-403F3EE64CAF	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DeleteNatGateway
&NatGatewayId=ngw-bp1uewa15k4iy5770ya89
&RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

- XML format

```
<DeleteNatGatewayResponse>
  <RequestId>0ED8D006-F706-4D23-88ED-E11ED28DCA-C0</
  RequestId>
</DeleteNatGatewayResponse>
```

- JSON format

```
{
  "RequestId": "0ED8D006-F706-4D23-88ED-E11ED28DCA-C0"
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
404	InvalidNatGatewayId.NotFound	The specified NatGatewayId does not exist in our records.	The specified NatGatewayId does not exist.
400	DependencyViolation.BandwidthPackages	There are BandwidthP packages on specified NatGateway not deleted.	The NAT Gateway is associated with one or more shared bandwidth packages. Delete all shared bandwidth packages first.

[See common error codes](#)

14.13 CreateForwardEntry

Adds a DNAT entry to a DNAT table.

Each DNAT entry consists of five parts: ExternalIp, ExternalPort, Protocol, InternalIp, InternalPort. After a DNAT entry is added, the NAT gateway forwards the data of the specified protocol received by [ExternalIp:ExternalPort] to [InternalIp:InternalPort], and returns a response.

Note the following before you call this action:

- Each combination of ExternalIp, ExternalPort, and Protocol of all DNAT entries must be unique (that is, a message cannot be forwarded to multiple targets).
- Each combination of Protocol, InternalIp, and InternalPort of all DNAT entries must be unique.
- If any DNAT entry in the DNAT table is in the Pending or Modifying state, a new DNAT entry cannot be added.
- ExternalIp must meet the following requirements:
 - If your account has a NAT bandwidth package purchased before January 26, 2018, ExternalIp must be a public IP address in the NAT bandwidth package of the NAT Gateway.
 - If your account does not have a NAT bandwidth package purchased before January 26, 2018, ExternalIP must be an EIP associated to the NAT Gateway.
 - A public IP address cannot be used in both SNAT and DNAT entries at the same time.
- InternalIp must meet the following requirements:
 - The InternalIp must belong to the CIDR block of the VPC to which the NAT Gateway belongs.
 - The DNAT entry takes effect only when the InternalIP is used by an ECS instance that is not associated with an EIP. If the InternalIP is used by non-ECS resources such as HaVip, SLB, or RDS, the DNAT entry does not take effect and the Internet traffic cannot be forwarded to the IP address.
 - A public IP address cannot be used in both SNAT and DNAT entries at the same time.
- A maximum of 100 DNAT entries can be added to a DNAT table.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreateForwardEntry	The name of this action. Value: CreateForwardEntry
ExternalIp	String	Yes	116.xx.xx.28	The public IP address.
ExternalPort	String	Yes	8080	The public port number. Value range: 1 to 65535.
ForwardTableId	String	Yes	ftb-bp1mbjubq34hlcqpa5u3a	The ID of the DNAT table.
InternalIp	String	Yes	192.168.xx.xx	The target private IP address.
InternalPort	String	Yes	80	The target private port number. Valid value: 1 to 65535.
IpProtocol	String	Yes	TCP	The protocol type. Valid values: - TCP : forward TCP packets. - UDP : forward UDP packets. - Any : forward all packets.
RegionId	String	Yes	cn-hangzhou	The region to which the NAT Gateway belongs. To query the region ID, call DescribeRegions.

Parameter	Type	Required?	Example value	Description
ForwardEntryName	String	No	ForwardEntry-1	The name of the DNAT entry to be created. The name must be 2 to 128 characters in length and start with a Chinese character or a letter. The name cannot start with <code>http ://</code> or <code>https ://</code> .

Response parameters

Parameter	Type	Example value	Description
ForwardEntryId	String	fwd-119smw5tkx-xxxxxxx	The ID of the DNAT entry.
RequestId	String	A4AEE536-A97A-40EB-9EBE-53A6948A6928	The ID of the request.

Examples

Request example

```
https :// vpc . aliyuncs . com /? Action = CreateForwardEntry
& ExternalIp = 116 . xx . xx . 28
& ExternalPort = 8080
& ForwardTableId = ftd - bp1mbjubq3 - 4hlxxxxxxx - x
& InternalIp = 192 . 168 . xx . xx
& InternalPort = 80
& IpProtocol = TCP
& RegionId = cn - hangzhou
&< CommonParameters >
```

Response example

• XML format

```
< CreateForwardEntryResponse >
  < ForwardEntryId > fwd - 119smw5tkx - xxxxxx </ ForwardEntryId >
  < RequestId > 2315DEB7 - 5E92 - 423A - 91F7 - 4C1EC9AD97 - C3 </ RequestId >
```

```
</ CreateForwardEntryResponse >
```

- JSON format

```
{
  "ForwardEntryId ":" fwd - 119smw5tkx xxxxxxxx ",
  "RequestId ":" 2315DEB7 - 5E92 - 423A - 91F7 - 4C1EC9AD97 C3 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
400	InvalidExternalIp.Malformed	The specified ExternalIp is not a valid IP address.	The specified ExternalIp is invalid.
400	InvalidInternalIp.Malformed	The specified InternalIp is not a valid IP address.	The specified InternalIp is invalid.
400	InvalidExternalPort.Malformed	The specified ExternalPort is not a valid port.	The specified ExternalPort is invalid.
400	InvalidInternalPort.Malformed	The specified InternalPort is not a valid port.	The specified InternalPort is invalid.
400	Forbidden.DestinationIpOutOfVpcCIDR	The specified Internal Ip is Out of VPC CIDR.	The specified InternalIp is not in the CIDR block of the VPC.
400	InvalidProtocol.ValueNotSupported	The specified IpProtocol does not support.	The specified protocol type is not supported.
400	IncorrectForwardEntryStatus	Some Forward entry status blocked this operation..	You cannot perform this operation because one or more DNAT entries are in the Pending or Modifying status.
404	InvalidForwardTableId.NotFound	Specified forward table does not exist.	The specified DNAT table does not exist.

HTTP status code	Error code	Error message	Description
404	InvalidExternalIp.NotFound	Specified External Ip address does not found on the VRouter	The specified ExternalIP does not exist.
400	Forbidden.ExternalIp.UsedInSnatTable	The specified ExternalIp is already used in SnatTable	The specified ExternalIp is being used by an SNAT rule. Select a different IP address or delete the SNAT rule that uses this IP address.
400	Forbindden	The specified Instance already bind eip	An EIP is already attached to this ECS instance. Detach the EIP from the ECS instance first and then add the forwarding rule.
400	Forbidden.InternalIp.OutOfVpcCIDR	The specified Internal Ip is Out of VPC CIDR.	The specified InternalIP is not in the CIDR block of the VPC.
400	Invalid.natgwNotExist	The specified natgateway not exist.	The specified NAT Gateway does not exist.
400	InvalidIp.NotInNatgw	The specified Ip not belong to natgateway.	The specified IP address does not belong to the NAT Gateway.
400	MissingParameter	Missing mandatory parameter	The required parameters are missing.
500	InternalError	The request processing has failed due to some unknown error.	The request cannot be processed due to unknown errors.
400	InvalidParameter.Name.Malformed	The specified Name is not valid.	The specified name is invalid. Enter a valid name and try again.

[See common error codes.](#)

14.14 DescribeForwardTableEntries

Queries DNAT entries in a DNAT table.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeForwardTableEntries	The name of this action. Value: DescribeForwardTableEntries
ForwardTableId	String	Yes	ftb-bp1mbjubq34hlcqpa5u3a	The ID of the DNAT table.
RegionId	String	Yes	cn-hangzhou	The region to which the NAT Gateway belongs. To query the region ID, call DescribeRegions.
ForwardEntryId	String	No	fwd-8vbn3bc8roygjp0gy3xk7	The ID of the DNAT entry allocated by the system.
PageNumber	Integer	No	1	The number of pages to return. Default value: 1 .
PageSize	Integer	No	10	The number of rows per page. Maximum value: 50 . Default value: 10 .

Response parameters

Parameter	Type	Example value	Description
ForwardTableEntries			A list of DNAT entries.
└ExternalIp	String	139.xxx.xx.79	The public IP address.
└ExternalPort	String	80	The public port.
└ForwardEntryId	String	fwd-119smw5tk	The ID of the DNAT entry.
└ForwardTableId	String	ftb-11tc6xgmv	The ID of the DNAT table to which the DNAT entry belongs.
└InternalIp	String	192.168.1.1	The private IP address.
└InternalPort	String	any	The target private port. Value range : 1 to 65535.
└IpProtocol	String	tcp	The protocol type.
└Status	String	Available	The status of the DNAT entry.
TotalCount	Integer	5	The number of queried entries.
PageNumber	Integer	1	The current page number.
PageSize	Integer	10	The number of entries per page.
RequestId	String	A6C4A8B1-7561-4509-949C-20DEB40D71E6	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DescribeForwardTableEntries
&ForwardTableId=ftb-bp1mbjubq34hlcqpa5u3a
&RegionId=cn-hangzhou
```

&< CommonParameters >

Response example

• XML format

```
< DescribeForwardTableEntriesResponse >
  < PageNumber > 1 </ PageNumber >
  < TotalCount > 1 </ TotalCount >
  < PageSize > 10 </ PageSize >
  < RequestId > 74F2BAD8 - AF35 - 4C57 - 81F1 - 5E33BFB0F5 F2 </
RequestId >
  < ForwardTableEntries >
    < ForwardTableEntry >
      < Status > Available </ Status >
      < IpProtocol > any </ IpProtocol >
      < ForwardEntryId > fwd - bp18jpb1tl m550di3q5p b </
ForwardEntryId >
      < ExternalIp > 47 . 97 . xx . xx </ ExternalIp >
      < ForwardTableId > ftb - bp15o9aylj 19vfvgtznzoy </
ForwardTableId >
      < ExternalPort > any </ ExternalPort >
      < InternalPort > any </ InternalPort >
      < InternalIp > 192 . 168 . xx . xx </ InternalIp >
    </ ForwardTableEntry >
  </ ForwardTableEntries >
</ DescribeForwardTableEntriesResponse >
```

• JSON format

```
{
  "PageNumber": 1,
  "TotalCount": 1,
  "PageSize": 10,
  "RequestId": "74F2BAD8 - AF35 - 4C57 - 81F1 - 5E33BFB0F5 F2",
  "ForwardTableEntries": {
    "ForwardTableEntry": [
      {
        "ForwardEntryId": "fwd - bp18jpb1tl m550di3q5p b",
        "IpProtocol": "any",
        "Status": "Available",
        "ExternalIp": "47 . 97 . xx . xx",
        "ForwardTableId": "ftb - bp15o9aylj 19vfvgtznzoy",
        "ExternalPort": "any",
        "InternalPort": "any",
        "InternalIp": "192 . 168 . xx . xx"
      }
    ]
  }
}
```

```
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
400	IncorretForwardEntryStatus	Some Forward entry status blocked this operation..	This operation is forbidden because one or more DNAT entries in the DNAT table are in the Pending or Modifying state.
404	InvalidForwardTableId.NotFound	Specified forwardTableId does not exist	The specified DNAT table does not exist.

[See common error codes](#)

14.15 ModifyForwardEntry

Modifies a DNAT entry.



Note:

You cannot modify a DNAT entry if the DNAT entry is in the Pending or Modifying state.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ModifyForwardEntry	The name of this action. Value: ModifyForwardEntry

Parameter	Type	Required?	Example value	Description
ForwardEntryId	String	Yes	fwd-8vbn3bc8roygjp0gy3xk7	The ID of the DNAT entry.
ForwardTableId	String	Yes	ftb-8vbx8xu2lqj9qb334h0ow	The ID of the DNAT table.
RegionId	String	Yes	cn-hangzhou	The region to which the NAT Gateway belongs. To query the region ID, call DescribeRegions.
ExternalIp	String	No	116.62.222.28	The public IP address.
ExternalPort	String	No	80	The public port. Value range: 1 to 65535.
InternalIp	String	No	10.34.56.78	The target private IP address.
InternalPort	String	No	80	The target private port. Value range: 1 to 65535.
IpProtocol	String	No	TCP	The protocol type. Valid values: - TCP : forward TCP packets. - UDP : forward UDP packets. - Any : forward all packets.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	24CC85DC-7700-4F09-9624-99E988C7DD03	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=ModifyForwardEntry&ForwardEntryId=fwd-8vbn3bc8roygjp0gy3xk7
```

```
& ForwardTableId = ftb - 8vbx8xu2lq j9qb334h0o w
& RegionId = cn - hangzhou
&< CommonParameters >
```

Response example

• XML format

```
< ModifyForwardEntryResponse >
  < RequestId > 2315DEB7 - 5E92 - 423A - 91F7 - 4C1EC9AD97 C3 </
  RequestId >
</ ModifyForwardEntryResponse >
```

• JSON format

```
{
  "RequestId ":" 2315DEB7 - 5E92 - 423A - 91F7 - 4C1EC9AD97 C3 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
400	InvalidExternalIp.Malformed	The specified ExternalIp is not a valid IP address.	The specified public IP address is invalid.
400	InvalidInternalIp.Malformed	The specified InternalIp is not a valid IP address.	The specified InternalIp is invalid.
400	InvalidExternalPort.Malformed	The specified ExternalPort is not a valid port.	The public port is invalid.
400	InvalidInternalPort.Malformed	The specified InternalPort is not a valid port.	The private port is invalid.
400	Forbidden.DestinationIpOutOfVpcCIDR	The specified Destination Ip is Out of VPC CIDR.	The specified InternalIp is not in the CIDR block of the VPC.
400	InvalidProtocol.ValueNotSupported	The specified IpProtocol does not support.	The specified protocol type is not supported.

HTTP status code	Error code	Error message	Description
400	IncorretForwardEntryStatus	Some Forward entry status blocked this operation..	You cannot perform this operation because one or more DNAT entries in the DNAT table are in the Pending or Modifying state.
400	QuotaExceeded	Forward entry quota exceeded in this route table.	The quota for custom route entries in the route table has been reached. To increase the quota, open a ticket.
404	InvalidForwardEntryId.NotFound	Specified forward entry ID does not exist	The specified DNAT entry does not exist.
404	InvalidExternalIp.NotFound	Specified External Ip address does not found on the VRouter	The specified ExternalIp does not exist.
404	InvalidForwardTableId.NotFound	Specified forward table does not exist.	The specified DNAT table does not exist.
400	Forbidden.ExternalIp.UsedInSnatTable	The specified ExternalIp is already used in SnatTable	This specified ExternalIp is being used by an SNAT rule. Select a different IP address or delete the SNAT rule that uses this IP address.
400	Forbidden.Already.Bounded	The specified instance already bounded	The specified instance is already attached.

[See common error codes](#)

14.16 DeleteForwardEntry

Deletes a DNAT entry.



Note:

You cannot delete a DNAT entry if the DNAT entry is in the Pending or Modifying state.

Debug

By using [API Explorer](#), you can debug APIs, automatically generate SDK example codes, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteForwardEntry	The name of this action. Value: DeleteForwardEntry
ForwardEntryId	String	Yes	fwd-8vbn3bc8roygjp0gy3xk7	The ID of the DNAT entry.
ForwardTableId	String	Yes	ftb-8vbx8xu2lqj9qb334h0ow	The ID of the DNAT table.
RegionId	String	Yes	cn-hangzhou	The region to which the NAT Gateway belongs. To query the region ID, call DescribeRegions.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	0ED8D006-F706-4D23-88ED-E11ED28DCAC0	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DeleteForwardEntry
&ForwardEntryId=fwd-8vbn3bc8roygjp0gy3xk7
&ForwardTableId=ftb-8vbx8xu2lqj9qb334h0ow
&RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

- XML format

```
< DeleteForwardEntryResponse >
  < RequestId > 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 </
  RequestId >
</ DeleteForwardEntryResponse >
```

- JSON format

```
< DeleteForwardEntryResponse >
  < RequestId > 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 </
  RequestId >
</ DeleteForwardEntryResponse >
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
400	IncorrectForwardEntryStatus	Some Forward entry status blocked this operation..	This operation cannot be performed because one or more DNAT entries are in the Pending or Modifying status.
404	InvalidForwardEntryId.NotFound	Specified forward entry ID does not exist	The specified DNAT entry does not exist.
404	InvalidForwardTableId.NotFound	Specified forward table does not exist.	The specified DNAT table does not exist.
400	IncorrectForwardEntryStatus	The Specified forwardEntry is not exist	The specified DNAT entry does not exist.
400	MissingParameter	Missing mandatory parameter	Required parameters are missing.

[See common error codes](#)

14.17 CreateSnatEntry

Adds an SNAT entry to an SNAT table.

Each SNAT entry consists of a `SourceVSwitchId` and a `SnatIp`. After an SNAT entry is added, ECS instances under the specified VSwitch can access the Internet using the public IP (`SnatIp`).

Before you call this action, note the following:

- The VSwitch specified in the SNAT entry must belong to the same VPC as the NAT Gateway.
- Each VSwitch can only be added with one SNAT entry.
- An SNAT entry cannot be added if there is a HaVip instance under the specified VSwitch.
- The public IP (`SnatIp`) address in the SNAT entry must meet the following requirements:
 - If your account has a NAT bandwidth package before January 26, 2018, the `SnatIp` must be a public IP address in the NAT bandwidth package of the NAT Gateway.
 - If your account does not have a NAT bandwidth package before January 26, 2018, the `SnatIp` must be an EIP attached to the NAT Gateway.
 - A public IP address cannot be used by a DNAT entry and an SNAT entry at the same time.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreateSnatEntry	The name of this action. Value: CreateSnatEntry

Parameter	Type	Required?	Example value	Description
RegionId	String	Yes	cn-hangzhou	The region to which the NAT Gateway belongs. To query the region ID, call DescribeRegions.
SnatIp	String	Yes	47.XXX.XXX.98	The public IP address. Separate multiple EIPs with commas.
SnatTableId	String	Yes	stb-bp190wu8io1vgevxxxxxx	The ID of the SNAT table.
SnatEntryName	String	No	SnatEntry-1	The name of the SNAT entry to be created. The name must be 2 to 128 characters in length and start with a letter or a Chinese character. The name cannot start with http :// or https ://.
SourceCIDR	String	No	10.1.1.0/24	The CIDR block of the VSwitch. Example value: 10.0.0.1/24.  Note: This parameter and the SourceVSwitchId parameter cannot be used at the same time. If you have specified the SourceVSwitchId parameter, you cannot specify the SourceCIDR parameter. If you have specified the SourceCIDR parameter, you cannot specify the SourceVSwitchId parameter.
SourceVSwitchId	String	No	vsw-bp1nhx2s9ui5oxxxxxxx	The ID of the VSwitch to access the Internet.

Response parameters

Parameter	Type	Example value	Description
SnatEntryId	String	snat-kmd6nv8fyx xxxxxxx	The ID of the SNAT entry.
RequestId	String	2315DEB7-5E92-423A-91F7-4C1EC9AD97C3	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=CreateSnatEntry
&RegionId=cn-hangzhou
&SnatIp=47.XXX.XXX.98
&SnatTableId=stb-bp190wu8io1vgevxxxxx
&<CommonParameters>
```

Response example

• XML format

```
<CreateSnatEntryResponse>
  <RequestId>2315DEB7-5E92-423A-91F7-4C1EC9AD97C3</RequestId>
  <SnatEntryId>snat-119smw5tkxxxxxx</SnatEntryId>
</CreateSnatEntryResponse>
```

• JSON format

```
{
  "RequestId": "2315DEB7-5E92-423A-91F7-4C1EC9AD97C3",
  "SnatEntryId": "snat-kmd6nv8fyxxxxxx"
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.

HTTP status code	Error code	Error message	Description
404	InvalidSnatTableId.NotFound	Specified SNAT table does not exist.	The specified SNAT table does not exist.
400	Forbidden.SourceVSwitchId.IncludeHaVip	There is some HaVips under specified VSwitch	One or more HAVIPs are already under the specified VSwitch.
400	InvalidSnatIp.Malformed	The specified SnatIp is not a valid IP address.	The specified SNAT IP address is invalid.
400	SNAT_IP_POOL_COUNT_TOO_MANY	The Snat pool ip too many.	The quota for IP addresses in the SNAT IP address pool has been reached.
400	Forbidden.SnatEntryCountLimited	SNAT entry in the specified SNAT table reach it's limit.	The quota for SNAT entries has been reached.
400	NOT_ALLOW_USE_SOURCE_CIDR	The User not in nat_scope_unlimited white list. Cannot use SourceCidr param.	The specified intranet IP address does not belong to the CIDR block of the VPC .
404	InvalidVSwitchId.NotFound	The specified virtual switch does not exists.	The specified VSwitch does not exist.
400	INVALID_PARAMETER	The parameter invalid.	The parameter is invalid.
400	Forbidden.SourceVSwitchId.Duplicated	The specified SourceCIDR is duplicated.	An SNAT rule has already been configured for this VSwitch.
404	InvalidSnatIp.NotFound	Specified SnatIp does not found on the NAT Gateway	The specified public IP address cannot be found in the NAT Gateway.
400	Forbidden.IpUsedInForwardTable	The specified SnatIp already used in forward table	This public IP address is being used by a DNAT rule. Select a different IP address or delete the DNAT rule that uses this IP address.

HTTP status code	Error code	Error message	Description
400	Forbidden	The specified Instance already bind eip	An EIP is already associated with this ECS instance. Disassociate the EIP from the ECS instance first and then add the forwarding rule.
400	InvalidParameter.Name.Malformed	The specified Name is not valid.	The specified name is invalid. Enter a valid name and try again.

[See common error codes.](#)

14.18 DescribeSnatTableEntries

Queries one or more SNAT entries in a SNAT table.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeSnatTableEntries	The name of this action. Value: DescribeForwardTableEntries
RegionId	String	Yes	cn-hangzhou	The region to which the NAT Gateway belongs. To query the region ID, call DescribeRegions.
SnatTableId	String	Yes	stb-8vbczigrhop8x5u3twlhd	The ID of the SNAT table.

Parameter	Type	Required ?	Example value	Description
PageNumber	Integer	No	1	The number of pages to return. Default value: 1 .
PageSize	Integer	No	10	The number of rows per page. Maximum value: 50 . Default value: 10 .
SnatEntryId	String	No	snat-8vbae8uqh7rjpk7d2kuwt	The ID of the SNAT entry.

Response parameters

Parameter	Type	Example value	Description
SnatTableEntries	N/A	N/A	A list of SNAT entries.
└SnatEntryId	String	snat-kmd6nv8fy	The ID of the SNAT entry.
└SnatIp	String	116.62.222.28	The public IP address in the SNAT entry.
└SnatTableId	String	stb-gz3r3odaw	The ID of the SNAT table to which the SNAT entry belongs.
└SourceCIDR	String	116.62.222.28/33	The source CIDR block of the SNAT entry.
└SourceVSwitchId	String	vsw-3xbxxxxx	The ID of the VSwitch that accesses the Internet through the SNAT function.
└Status	String	Pending	The status of the SNAT entry.
TotalCount	Integer	1	The number of queried entries.
PageNumber	Integer	1	The current page number.

Parameter	Type	Example value	Description
PageSize	Integer	5	The number of entries per page.
RequestId	String	6D7E89B1-1C5B-412B-8585-4908E222EED5	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DescribeSnatTableEntries
&RegionId=cn-hangzhou
&SnatTableId=stb-8vbczigrho-p8x5u3twlh-d
&<CommonParameters>
```

Response example

• XML format

```
<DescribeSnatTableEntriesResponse>
  <PageNumber>1</PageNumber>
  <PageSize>10</PageSize>
  <RequestId>6D7E89B1-1C5B-412B-8585-4908E222EED5</RequestId>
  <SnatTableEntries>
    <SnatTableEntry>
      <SnatEntryId>snat-kmd6nv8fy</SnatEntryId>
      <SnatIp>139.xxx.xx.40</SnatIp>
      <SnatTableId>stb-gz3r3odaw</SnatTableId>
      <SourceCIDR>192.168.1.0/24</SourceCIDR>
      <SourceVSwitchId>vsw-yrv0xxxxx</SourceVSwitchId>
      <Status>Available</Status>
    </SnatTableEntry>
    <SnatTableEntry>
      <SnatEntryId>snat-bs5bezbme</SnatEntryId>
      <SnatIp>139.xxx.xx.40</SnatIp>
      <SnatTableId>stb-gz3r3odaw</SnatTableId>
      <SourceCIDR>192.168.3.0/24</SourceCIDR>
      <SourceVSwitchId>vsw-3xbxxxxx</SourceVSwitchId>
      <Status>Available</Status>
    </SnatTableEntry>
  </SnatTableEntries>
</DescribeSnatTableEntriesResponse>
```

• JSON format

```
{
  "SnatTableEntries":{
    "SnatTableEntry":[
      {
        "Status":"Available",
        "SourceCIDR":"192.168.1.0/24",
        "SnatTableId":"stb-gz3r3odaw",
```

```

    " SnatIp ":" 139 . xxx . xx . 40 ",
    " SnatEntryI d ":" snat - kmd6nv8fy ",
    " SourceVSwi tchId ":" vsw - yrv0xxxxx "
  },
  {
    " Status ":" Available ",
    " SourceCIDR ":" 192 . 168 . 3 . 0 / 24 ",
    " SnatTableI d ":" stb - gz3r3odaw ",
    " SnatIp ":" 139 . xxx . xx . 40 ",
    " SnatEntryI d ":" snat - bs5bezbme ",
    " SourceVSwi tchId ":" vsw - 3xbxxxxx "
  }
]
},
" PageNumber ": 1 ,
" PageSize ": 10 ,
" RequestId ":" 6D7E89B1 - 1C5B - 412B - 8585 - 4908E222EE D5 "
}

```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
404	InvalidSna tTableId.NotFound	Specified SNAT table does not exist.	The specified SNAT table does not exist.

[See common error codes](#)

14.19 ModifySnatEntry

Modifies an SNAT entry.



Note:

You cannot modify an SNAT entry that is in the Pending or Modifying state.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ModifySnatEntry	The name of this action. Value: ModifySnatEntry
RegionId	String	Yes	cn-hangzhou	The region to which the NAT Gateway belongs. To query the region ID, call DescribeRegions.
SnatEntryId	String	Yes	snat-bp1vcgcf8tm0plqcgfl04	The ID of the SNAT entry.
SnatIp	String	Yes	47.XXX.XXX.98	The public IP address. Separate multiple IP addresses with commas.
SnatTableId	String	Yes	stb-8vbczigrho p8x5u3twlh d	The ID of the SNAT table.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	2315DEB7-5E92-423A-91F7-4C1EC9AD97C3	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=ModifySnatEntry
&RegionId=cn-hangzhou
&SnatEntryId=snat-bp1vcgcf8tm0plqcgfl04
&SnatIp=47.XXX.XXX.98
&SnatTableId=stb-8vbczigrho p8x5u3twlh d
&<CommonParameters>
```

Response example

- XML format

```
< ModifySnat EntryRespo nse >
  < RequestId > 2315DEB7 - 5E92 - 423A - 91F7 - 4C1EC9AD97 C3 </
    RequestId >
</ ModifySnat EntryRespo nse >
```

- JSON format

```
{
  "RequestId ":" 2315DEB7 - 5E92 - 423A - 91F7 - 4C1EC9AD97 C3 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
404	InvalidSnatTableId.NotFound	Specified SNAT table does not exist.	The specified SNAT table does not exist.
400	InvalidSnatIp.Malformed	The specified SnatIp is not a valid IP address.	The specified SnatIp is invalid.
404	InvalidSnatEntryId.NotFound	Specified SNAT entry does not exist.	The specified SNAT entry does not exist.
400	Forbidden.SourceVSwitchId.Duplicated	The specified SourceCIDR is duplicated.	SNAT rules have already been configured for this VSwitch.
400	Forbidden.IpUsedInForwardTable	The specified SnatIp already used in forward table	The specified public IP address is already being used by a DNAT rule. Select a different IP address or delete the DNAT rule that uses this IP address.

[See common error codes](#)

14.20 DeleteSnatEntry

Deletes an SNAT entry.



Note:

You cannot delete an SNAT entry if the SNAT entry is in the Pending or Modifying state.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteSnatEntry	The name of this action. Value: DeleteSnatEntry
RegionId	String	Yes	cn-hangzhou	The region ID of the NAT Gateway where the SNAT entry is to be deleted. To query the region ID, call DescribeRegions.
SnatEntryId	String	Yes	snat-bp1vcgcf8tm0plqcgfl04	The ID of the SNAT entry to be deleted.
SnatTableId	String	Yes	stb-bp190wu8io1vgev80kec7	The ID of the SNAT table from which the SNAT entry is to be deleted.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	47B80B6A-759A-479C-A565-76D04BDA29F3	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DeleteSnatEntry
&RegionId=cn-hangzhou
&SnatEntryId=snat-bp1vcgcf8t-m0plqcgfl0-4
&SnatTableId=stb-bp190wu8io-1vgev80kec-7
&<CommonParameters>
```

Response example

- XML format

```
<DeleteSnatEntryResponse>
  <RequestId>0ED8D006-F706-4D23-88ED-E11ED28DCA-C0</
  RequestId>
</DeleteSnatEntryResponse>
```

- JSON format

```
{
  "RequestId": "0ED8D006-F706-4D23-88ED-E11ED28DCA-C0"
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
400	IncorrectSnatEntryStatus	Some Snat entry status blocked this operation..	You cannot perform this operation because one or more SNAT entries are in the Pending or Modifying state.
404	InvalidSnatEntryId.NotFound	Specified Snat entry ID does not exist	The specified SNAT entry does not exist.
404	InvalidSnatTableId.NotFound	Specified SNAT table does not exist.	The specified SNAT table does not exist.

HTTP status code	Error code	Error message	Description
404	InvalidSnatEntryId.NotFound	Specified SNAT entry does not exist.	The specified SNAT entry does not exist.

[View common error codes](#)

15 Global Acceleration

15.1 CreateGlobalAccelerationInstance

Creates a Global Acceleration instance.



Note:

This API only supports creating Pay-As-You-Go Global Acceleration instances.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreateGlobalAccelerationInstance	The name of this action. Value : CreateGlobalAccelerationInstance
Bandwidth	Integer	Yes	10	The bandwidth in Mbps of the instance. Valid values: 10 , 20 , 30 , 40 , 50 , 60 , 70 , 80 , 90 , 100 , 200 , 300 , 400 , 500 , 600 , 700 , 800 , 900 , 1000

Parameter	Type	Required?	Example value	Description
RegionId	String	Yes	cn-hangzhou	The ID of the region where the Global Acceleration instance is located. To query the region ID, call DescribeRegions.
ServiceLocation	String	Yes	china-mainland	The service area of the instance. Valid values: - china - mainland : Mainland China - north - america : North America - asia - pacific : Asia Pacific - europa : Europe For more information, see Service areas.
BandwidthType	String	No	Exclusive	The type of the Global Acceleration instance. Valid values: - Sharing : Creates a shared-bandwidth instance. - Exclusive (default) : Creates a dedicated-bandwidth instance. For more information, see Instance types.

Parameter	Type	Required?	Example value	Description
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.
Description	String	No	My GA	The description of the Global Acceleration instance. The description must be 2 to 256 characters in length. It must start with a letter, but cannot start with <code>http://</code> or <code>https://</code>.
Name	String	No	GA-1	The name of the instance. The name must be 2 to 128 characters in length and can contain letters, numbers, periods (.), underscores (_), or hyphens (-). The name must start with a letter, but cannot start with <code>http://</code> or <code>https://</code>.

Response parameters

Parameter	Type	Example value	Description
GlobalAccelerationInstanceId	String	ga-t4nluhu6	The ID of the Global Acceleration instance.

Parameter	Type	Example value	Description
IpAddress	String	12.34.56.78	The public IP address of the Global Acceleration instance.
RequestId	String	21AAFD16-F784-4BFB-XXXX-XXXXXXXX	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=CreateGlobalAccelerationInstance
&Bandwidth=10
&RegionId=cn-hangzhou
&ServiceLocation=china-mainland
&<CommonParameters>
```

Response example

XML format

```
<CreateGlobalAccelerationInstanceResponse>
  <GlobalAccelerationInstanceId>ga-t4nluhu6</GlobalAccelerationInstanceId>
  <IpAddress>12.34.56.78</IpAddress>
  <RequestId>21AAFD16-F784-4BFB-XXXX-XXXXXXXX</RequestId>
</CreateGlobalAccelerationInstanceResponse>
```

JSON format

```
{
  "GlobalAccelerationInstanceId": "ga-t4nluhu6",
  "RequestId": "21AAFD16-F784-4BFB-XXXX-XXXXXXXX",
  "IpAddress": "12.34.56.78"
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidServiceLocation.ValueNotSupported	The specified ServiceLocation is not supported.	The specified service area is not supported.

HTTP status code	Error code	Error message	Description
400	InvalidGlobalAccelerationInstanceName.Malformed	The specified Name is not valid.	The name format is invalid.
400	InvalidGlobalAccelerationInstanceDescription.Malformed	The specified Description is not valid.	The description format is invalid

[See common error codes](#)

15.2 DescribeGlobalAccelerationInstances

Queries one or more Global Acceleration instances.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeGlobalAccelerationInstances	The name of this action. Value: DescribeGlobalAccelerationInstances
RegionId	String	Yes	cn-hangzhou	The ID of the region where the Global Acceleration instance is located. To query the region ID, call DescribeRegions.

Parameter	Type	Required ?	Example value	Description
BandwidthType	String	No	Exclusive	The type of the Global Acceleration instance. Valid values: - Sharing : Queries only shared-bandwidth instances. - Exclusive (Default): Queries only dedicated-bandwidth instances.
GlobalAccelerationInstanceId	String	No	ga-234sljmxazb4	The ID of the Global Acceleration instance.
IncludeReservationData	Boolean	No	false	Indicates whether one or more specifications in the purchase order that have not taken effect are included. Default value: false.
IpAddress	String	No	12.34.56.78	The public IP address of the Global Acceleration instance.
Name	String	No	GA-1	The name of the Global Acceleration instance.
PageNumber	Integer	No	10	The number of pages to return. Default value: 1 .
PageSize	Integer	No	10	The number of rows per page. Maximum value: 50 . Default value: 10 .
ServerId	String	No	i-sxjbl9xgc	The ID of the accelerated backend server.

Parameter	Type	Required ?	Example value	Description
ServiceLocation	String	No	china-mainland	The service area of the Global Acceleration instance. Valid values: - china - mainland : Mainland China - north - america : North America - asia - pacific : Asia Pacific - europa : Europe
Status	String	No	Available	The status of the Global Acceleration instance. Valid values: - Available : available - Inuse : allocated - Associating : being attached - Unassociating : being detached

Response parameters

Parameter	Type	Example value	Description
GlobalAccelerationInstances	N/A	N/A	A list of Global Acceleration instances.
^L AccelerationLocation	String	china-mainland	The accelerated area of the Global Acceleration instance.

Parameter	Type	Example value	Description
BackendServers	N/A	N/A	The list of backend servers associated with the Global Acceleration instance.
RegionId	String	cn-Beijing	The ID of the region where the backend server is located.
ServerId	String	i-2zeg83zvn5d4ed4y2rxx	The ID of the backend server.
ServerIpAddress	String	172.17.109.xxx	The IP address of the backend server.
ServerType	String	EcsInstance	The type of the backend server.
Bandwidth	String	10	The peak bandwidth of the Global Acceleration instance.
BandwidthType	String	Exclusive	The bandwidth type of the Global Acceleration instance.
ChargeType	String	PrePaid	The billing method of the Global Acceleration instance: · PostPaid: Pay-As-You-Go
CreationTime	String	2018-07-05T03:39:31Z	The time at which the Global Acceleration instance was created. UTC time is used.
Description	String	apiDescription	The description of the Global Acceleration instance.
ExpiredTime	String	2018-08-05T16:00Z	The time at which the Global Acceleration instance is to expire.
GlobalAccelerationInstanceId	String	ga-bp1x99kj7kl1ziw5xuwb5	The ID of the Global Acceleration instance.

Parameter	Type	Example value	Description
InternetChargeType	String	PayByBandwidth	The billing method of the Global Acceleration instance.
IpAddress	String	47.98.99.xxx	The public IP address of the exclusive-bandwidth Global Acceleration instance.
Name	String	instanceName	The name of the Global Acceleration instance.
PublicIpAddresses	N/A	N/A	The public IP address.
AllocationId	String	12.34.56.78	The ID of the public IP address of the Global Acceleration instance.
IpAddress	String	12.34.56.78	The public IP address of the Global Acceleration instance.
RegionId	String	cn-hangzhou	The region where the Global Acceleration instance is located.
ServiceLocation	String	china-mainland	The service area of the Global Acceleration instance.
Status	String	InUse	The status of the Global Acceleration instance.
TotalCount	Integer	1	The number of queries entries.
PageNumber	Integer	1	The current page number.
PageSize	Integer	10	The number of entries per page.
RequestId	String	6B4EE38D-C75B-4E1F-844E-863A94430676	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DescribeGlobalAccelerationInstances
&RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

XML format

```
<DescribeGlobalAccelerationInstancesResponse>
  <PageNumber>1</PageNumber>
  <TotalCount>1</TotalCount>
  <PageSize>10</PageSize>
  <RequestId>6B4EE38D-C75B-4E1F-844E-863A94430676</RequestId>
  <GlobalAccelerationInstances>
    <GlobalAccelerationInstance>
      <ChargeType>PrePaid</ChargeType>
      <GlobalAccelerationInstanceId>ga-bp1x99kj7k1l1ziw5xuwb5</GlobalAccelerationInstanceId>
      <HasReservationData>>false</HasReservationData>
      <Description/>
      <BackendServers>
        <BackendServer>
          <ServerId>i-2zeg83zvn5d4ed4y2r4c</ServerId>
          <RegionId>cn-beijing</RegionId>
          <ServerType>EcsInstance</ServerType>
          <ServerIpAddress>172.17.109.xxx</ServerIpAddress>
        </BackendServer>
      </BackendServers>
      <IpAddress>47.98.99.xxx</IpAddress>
      <InternetChargeType>PayByBandwidth</InternetChargeType>
      <Name/>
      <BandwidthType>Exclusive</BandwidthType>
      <CreationTime>2018-07-05T03:39:31Z</CreationTime>
      <Status>InUse</Status>
      <ServiceLocation>china-mainland</ServiceLocation>
      <RegionId>cn-hangzhou</RegionId>
      <AccelerationLocation>china-mainland</AccelerationLocation>
      <OperationLocks/>
      <ExpiredTime>2018-08-05T16:00Z</ExpiredTime>
      <PublicIpAddresses/>
      <Bandwidth>10</Bandwidth>
    </GlobalAccelerationInstance>
  </GlobalAccelerationInstances>
</DescribeGlobalAccelerationInstancesResponse>
```

JSON format

```
{
  "PageNumber": 1,
```

```

" TotalCount ": 1 ,
" PageSize ": 10 ,
" RequestId ":" 6B4EE38D - C75B - 4E1F - 844E - 863A944306 76 ",
" GlobalAccelerationInstances ":{
  " GlobalAccelerationInstance ":[
    {
      " ChargeType ":" PrePaid ",
      " GlobalAccelerationInstanceId ":" ga - bp1x99kj7k
l1ziw5xuwb 5 ",
      " HasReservationData ": false ,
      " Description ":"",
      " BackendServers ":{
        " BackendServer ":[
          {
            " ServerId ":" i - 2zeg83zvn5 d4ed4y2r4c ",
            " RegionId ":" cn - beijing ",
            " ServerType ":" EcsInstance ",
            " ServerIpAddress ":" 172 . 17 . 109 . xxx "
          }
        ]
      },
      " IpAddress ":" 47 . 98 . 99 . xxx ",
      " InternetChargeType ":" PayByBandwidth ",
      " Name ":"",
      " BandwidthType ":" Exclusive ",
      " CreationTime ":" 2018 - 07 - 05T03 : 39 : 31Z ",
      " Status ":" InUse ",
      " ServiceLocation ":" china - mainland ",
      " RegionId ":" cn - hangzhou ",
      " AccelerationLocation ":" china - mainland ",
      " OperationLocks ":{
        " LockReason ":[]
      },
      " ExpiredTime ":" 2018 - 08 - 05T16 : 00Z ",
      " PublicIpAddresses ":{
        " PublicIpAddress ":[]
      },
      " Bandwidth ":" 10 "
    }
  ]
}
}
}

```

Error codes

[See common error codes](#)

15.3 ModifyGlobalAccelerationInstanceAttributes

Modifies the name and description of a Global Acceleration instance.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ModifyGlobalAccelerationInstanceAttributes	The name of this action. Value: ModifyGlobalAccelerationInstanceAttributes
GlobalAccelerationInstanceId	String	Yes	ga-14fdsf3xxx xx	The ID of the Global Acceleration instance.
RegionId	String	Yes	cn-hangzhou	The region where the Global Acceleration instance is located. To query the region ID, call DescribeRegions.
Description	String	No	My GA	The description of the Global Acceleration instance. The description must be 2 to 256 characters in length. It must start with a letter, but cannot start with <code>http://</code> or <code>https://</code> .

Parameter	Type	Required?	Example value	Description
Name	String	No	GA-1	The name of the Global Acceleration instance. The name must be 2 to 128 characters in length and can contain letters, numbers, periods (.), underscores (_), or hyphens (-). The name must start with a letter, but cannot start with <code>http://</code> or <code>https://</code>.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	BD5BCEE8-F62C-40C2-9AC3-89XXXXXXXXXX	The ID of the request.

Example

Request example

```
https://vpc.aliyuncs.com/?Action=ModifyGlobalAccelerationInstanceAttributes
&GlobalAccelerationInstanceId=ga-14fdsf3xxx-xx
&RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

XML format

```
<ModifyGlobalAccelerationInstanceAttributesResponse>
  <RequestId>185E81B1-3916-4667-B48F-C52409B33F2B</RequestId>
</ModifyGlobalAccelerationInstanceAttributesResponse>
```

JSON format

```
{
  "RequestId": "BD5BCEE8-F62C-40C2-9AC3-89XXXXXXXXXX"
```

```
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidGlobalAccelerationInstanceId.NotFound	The specified GlobalAccelerationInstanceId is not found.	The specified Global Acceleration instance does not exist.
400	InvalidGlobalAccelerationInstanceName.Malformed	The specified Name is not valid.	The name format is invalid.
400	InvalidGlobalAccelerationInstanceDescription.Malformed	The specified Description is not valid.	The description format is invalid.

[See common error codes](#)

15.4 ModifyGlobalAccelerationInstanceSpec

Modifies the bandwidth of a Global Acceleration instance.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ModifyGlobalAccelerationInstanceSpec	The name of this action. Value: ModifyGlobalAccelerationInstanceSpec

Parameter	Type	Required?	Example value	Description
Bandwidth	Integer	Yes	10	The peak bandwidth in Mbps of the Global Acceleration instance. Valid values: 10,20,30,40,50,60,70,80,90,100,200,300,400,500,600,700,800,900,1000
GlobalAccelerationInstanceId	String	Yes	ga-32s33sxxxxx xxxx	The ID of the Global Acceleration instance.
RegionId	String	Yes	cn-hangzhou	The ID of the region where the Global Acceleration instance is located. To query the region ID, call DescribeRegions.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	BD5BCEE8-F62C-40C2-9AC3-89XXXXXXXXXX	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=ModifyGlobalAccelerationInstanceSpec
&Bandwidth=10
&GlobalAccelerationInstanceId=ga-32s33sxxxxx-xxxx
&RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

XML format

```
<ModifyGlobalAccelerationInstanceSpecResponse>
  <RequestId>BD5BCEE8-F62C-40C2-9AC3-89XXXXXXXXXX</RequestId>
```

```
</ ModifyGlobalAccelerationInstanceSpecResponse >
```

JSON format

```
{
  "RequestId ":" BD5BCEE8 - F62C - 40C2 - 9AC3 - 89XXXXXXXXX  X "
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidGlobalAccelerationInstanceId.NotFound	The specified GlobalAccelerationInstanceId is not found.	The specified Global Acceleration instance does not exist.
400	InvalidGlobalAccelerationInstanceName.Malformed	The specified Name is not valid.	The name format is invalid.
400	InvalidGlobalAccelerationInstanceDescription.Malformed	The specified Description is not valid.	The description format is invalid.
500	InternalServerError	The request processing has failed due to some unknown error.	An error occurred while the request was being processed.

[See common error codes](#)

15.5 DeleteGlobalAccelerationInstance

Deletes a Global Acceleration instance.

Note the following before you call this action:

- Only Pay-As-You-Go instances can be deleted.
- If you want to delete a dedicated-bandwidth instance, you must first detach the backend server before deleting the instance.

- If you want to delete a shared-bandwidth instance, you must first disassociate the EIP or EIPs before deleting the instance.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteGlobalAccelerationInstance	The name of this action. Value : DeleteGlobalAccelerationInstance
GlobalAccelerationInstanceId	String	Yes	ga-asdfsl22sxxxx	The ID of the Global Acceleration instance.
RegionId	String	Yes	cn-hangzhou	The ID of the region where the Global Acceleration instance is located. To query the region ID, call DescribeRegions.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	E6E63B2A-9820-44A8-A359-9BB2DAEE6424	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DeleteGlobalAccelerationInstance
&GlobalAccelerationInstanceId=ga-asdfsl22sxxxx
&RegionId=cn-hangzhou
```

```
&< CommonParameters >
```

Response example

XML format

```
< DeleteGlobalAccelerationInstanceResponse >
  < RequestId > E6E63B2A - 9820 - 44A8 - A359 - 9BB2DAEE64 24 </
    RequestId >
</ DeleteGlobalAccelerationInstanceResponse >
```

JSON format

```
{
  "RequestId ":" E6E63B2A - 9820 - 44A8 - A359 - 9BB2DAEE64 24 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	IncorrectGlobalAccelerationInstanceIdStatus	Current GlobalAccelerationInstance status does not support this operation.	The specified Global Acceleration instance does not support this operation.
400	InvalidGlobalAccelerationInstanceId.NotFound	The specified GlobalAccelerationInstanceId is not found.	The specified Global Acceleration instance does not exist.
400	IncorrectStatus	This operation would be allowed only when status of this RouterInterface is Idle/Inactive.	This operation is not permitted because the associated router interface is not in the Idle or Inactive state.

[See common error codes](#)

15.6 AssociateGlobalAccelerationInstance

Attaches a backend server to a dedicated-bandwidth Global Acceleration instance.

Note the following before you call this action:

- Only a VPC ECS instance or a VPC SLB instance can be attached to a dedicated-bandwidth instance.

- A dedicated-bandwidth instance can be associated with only one backend server.
- A backend server can be attached to multiple dedicated-bandwidth instances.
- The backend server and the dedicated-bandwidth instance must belong to the same account.
- The backend server to attach must be in the service area of the dedicated-bandwidth instance.
- Only dedicated-bandwidth instances support attaching a backend server by using this API.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	AssociateGlobalAccelerationInstance	The name of this action. Value : AssociateGlobalAccelerationInstance
BackendServerId	String	Yes	i-saf23xxxxxxx	The ID of the backend server.
BackendServerRegionId	String	Yes	cn-shanghai	The region where the backend server is located. It must belong to the service area of the dedicated-bandwidth instance.
GlobalAccelerationInstanceId	String	Yes	ga-lsajj32xxxxxxx	The ID of the dedicated-bandwidth instance.

Parameter	Type	Required?	Example value	Description
RegionId	String	Yes	cn-hangzhou	The ID of the region where the dedicated-bandwidth instance is located. To query the region ID, call DescribeRegions.
BackendServerType	String	No	EcsInstance	The type of the backend server. Valid values: - EcsInstance (default): ECS instance - SlbInstance: SLB instance

Response parameters

Parameter	Type	Example value	Description
RequestId	String	DDF2CC38-76C7-4000-909D-B2088158AEDA	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=AssociateGlobalAccelerationInstance
&BackendServerId=i-saf23xxxxx
&BackendServerRegionId=cn-shanghai
&GlobalAccelerationInstanceId=ga-lsajj32xxx
&RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

XML format

```
<AssociateGlobalAccelerationInstanceResponse>
  <RequestId>DDF2CC38-76C7-4000-909D-B2088158AEDA</RequestId>
```

```
</ AssociateG lobalAccel erationIns tanceRespo nse >
```

JSON format

```
{
  " RequestId ":" DDF2CC38 - 76C7 - 4000 - 909D - B2088158AE DA "
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidGlobalAccelerationInstanceId.NotFound	The specified GlobalAccelerationInstanceId is not found.	The specified Global Acceleration instance does not exist.
404	InvalidBackendServerId.NotFound	The specified BackendServerId is not found.	The specified backend server does not exist.
400	IncorrectGlobalAccelerationInstanceIdStatus	Current GlobalAccelerationInstance status does not support this operation.	The specified Global Acceleration instance does not support this operation.
400	InvalidBackendServerId.NotInVPC	The specified BackendServerId is not in VPC.	The specified backend server does not use the VPC network type.
400	TaskConflict.AssociateGlobalAccelerationInstance	Operate too frequent.	The system cannot process this many requests. Please try again later.
400	InvalidBackendServerRegionId.EqualRegionId	The specified BackendServerRegionId can not be the same as RegionId.	The specified region ID and backend server region ID cannot be the same.

HTTP status code	Error code	Error message	Description
400	InvalidAssociation. Duplicated	Specified instance already is associated.	This instance is already attached to an EIP or Global Acceleration instance. To attach the instance to a different EIP or Global Acceleration instance, detach the current EIP or Global Acceleration instance first.
400	InvalidBackendServerType. NotFound	The specified BackendServerType is not supported.	The specified backend server type is not supported.
400	InvalidParameter	The specified parameter is not valid.	The specified parameter value is invalid.

[See common error codes](#)

15.7 UnassociateGlobalAccelerationInstance

Detaches a Global Acceleration instance from its corresponding backend server.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	UnassociateGlobalAccelerationInstance	The name of this action. Value: UnassociateGlobalAccelerationInstance
GlobalAccelerationInstanceId	String	Yes	ga-lsxee33xxx	The ID of the Global Acceleration instance.

Parameter	Type	Required?	Example value	Description
RegionId	String	Yes	cn-hangzhou	The region where the Global Acceleration instance is located. . To query the region ID, call DescribeRegions.
InstanceType	String	No	EcsInstance	The instance type. Valid values: • RemoteEcsInstance: ECS instance • RemoteSlbInstance: SLB instance • RemoteEniInstance: ENI instance

Response parameters

Parameter	Type	Example value	Description
RequestId	String	BD5BCEE8-F62C-40C2-9AC3-89XXXXXXXXXX	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=UnassociateGlobalAccelerationInstance
&GlobalAccelerationInstanceId=ga-1sxee33xxx
&RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

XML format

```
<UnassociateGlobalAccelerationInstanceResponse>
  <RequestId>BD5BCEE8-F62C-40C2-9AC3-89XXXXXXXXXX</RequestId>
```

```
</ Unassociat eGlobalAcc elerationI nstanceRes ponse >
```

JSON format

```
{  
  " RequestId ":" BD5BCEE8 - F62C - 40C2 - 9AC3 - 89XXXXXXXX X "  
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidGlobalAccelerationInstanceId.NotFound	The specified GlobalAccelerationInstanceId is not found.	The specified Global Acceleration instance does not exist.
400	IncorrectGlobalAccelerationInstanceIdStatus	Current GlobalAccelerationInstance status does not support this operation.	The specified Global Acceleration instance does not support this operation.

[See common error codes](#)

15.8 DescribeServerRelatedGlobalAccelerationInstances

Queries Global Acceleration instances attached to a backend server.



Note:

This API only supports querying dedicated-bandwidth instances.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeServerRelatedGlobalAccelerationInstances	The name of this action. Value : DescribeServerRelatedGlobalAccelerationInstances
RegionId	String	Yes	cn-hangzhou	The ID of the region where the Global Acceleration instance is located. To query the region ID, call DescribeRegions.
ServerId	String	Yes	i-12s3sdfxxx xxxxx	The ID of the backend server.
ServerType	String	No	EcsInstance	The type of the backend server. Valid values: - EcsInstance (default): ECS instance. - SlbInstance: SLB instance.

Response parameters

Parameter	Type	Example value	Description
GlobalAccelerationInstances	N/A	N/A	A list of Global Acceleration instances.
[⌞] GlobalAccelerationInstanceId	String	ga-t4nku6vv9x xxxxxxxxx	The ID of the Global Acceleration instance.
[⌞] IpAddress	String	12.34.56.78	The public IP address of the Global Acceleration instance.

Parameter	Type	Example value	Description
<code>RegionId</code>	String	ap-southeast-1	The ID of the region where the Global Acceleration instance is located.
<code>ServerIpAddress</code>	String	172.24.52.234	The IP address of the backend server.
<code>RequestId</code>	String	A8252014-D8DE-4D85-AF35-AFEXXXXXXX	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DescribeServerRelatedGlobalAccelerationInstances
&RegionId=cn-hangzhou
&ServerId=i-12s3sdfxxx
&<CommonParameters>
```

Response example

XML format

```
<DescribeServerRelatedGlobalAccelerationInstancesResponse>
  <GlobalAccelerationInstances>
    <GlobalAccelerationInstance>
      <GlobalAccelerationInstanceId>ga-t4nku6vv9xxxxxxx
    </GlobalAccelerationInstanceId>
    <IpAddress>12.34.56.78</IpAddress>
    <RegionId>ap-southeast-1</RegionId>
    <ServerIpAddress>172.24.52.234</ServerIpAddress>
    </GlobalAccelerationInstance>
  </GlobalAccelerationInstances>
  <RequestId>A8252014-D8DE-4D85-AF35-AFEXXXXXXX</RequestId>
</DescribeServerRelatedGlobalAccelerationInstancesResponse>
```

JSON format

```
{
  "RequestId": "A8252014-D8DE-4D85-AF35-AFEXXXXXXX",
  "GlobalAccelerationInstances": {
    "GlobalAccelerationInstance": [
      {
        "GlobalAccelerationInstanceId": "ga-t4nku6vv9xxxxxxx",
        "RegionId": "ap-southeast-1",
        "IpAddress": "12.34.56.78",

```

```

    "ServerIpAddress": "172.24.52.234"
  }
}
}
}

```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidBackendServerId.NotFound	The specified BackendServerId is not found.	The specified backend server does not exist.
400	InvalidBackendServerId.NotInVPC	The specified BackendServerId is not in VPC.	The specified backend server does not support the VPC network type.
400	InvalidBackendServerType.NotFound	The specified BackendServerType is not supported.	The specified backend server type is not supported.

[See common error codes](#)

15.9 AddGlobalAccelerationInstanceIp

Adds an EIP to a shared-bandwidth instance.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	AddGlobalAccelerationInstanceIp	The name of this action. Value: AddGlobalAccelerationInstanceIp
GlobalAccelerationInstanceId	String	Yes	ga-LXXX111	The ID of the shared-bandwidth instance.

Parameter	Type	Required?	Example value	Description
IpInstanceId	String	Yes	i-rw434rwfaf-xxx	The ID of the EIP. To query the EIP ID, call <code>DescribeEipAddresses</code>.  Note: The billing method of the EIP must be Pay-As-You-Go, and the regions of the EIP and the instance must be the same.
RegionId	String	Yes	cn-hangzhou	The ID of the region where the shared-bandwidth instance is located. To query the region ID, call <code>DescribeRegions</code>.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	01FDDD49-C4B7-4D2A-A8E5-A93915C450A6	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=AddGlobalAccelerationInstanceIp
&GlobalAccelerationInstanceId=ga-LXXX111
&IpInstanceId=i-rw434rwfaf-xxx
&RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

XML format

```
<AddGlobalAccelerationInstanceIpResponse>
```

```
< RequestId > 01FDDD49 - C4B7 - 4D2A - A8E5 - A93915C450 A6 </
RequestId >
</ AddGlobalAccelerationInstanceIpResponse >
```

JSON format

```
{
  "RequestId": "01FDDD49 - C4B7 - 4D2A - A8E5 - A93915C450 A6 "
}
```

Error codes

HTTP status code	Type	Example value	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
404	InvalidBandwidthPackageId.NotFound	The specified bandwidthPackageId does not exist in our records.	The specified shared-bandwidth package does not exist.

[See common error codes](#)

15.10 RemoveGlobalAccelerationInstanceIp

Removes an EIP from a shared-bandwidth instance.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	RemoveGlobalAccelerationInstanceIp	The name of this action. Value: RemoveGlobalAccelerationInstanceIp
GlobalAccelerationInstanceId	String	Yes	ga-m5ex47zwya1sejynidhms	The ID of the shared-bandwidth instance.

Parameter	Type	Required?	Example value	Description
IpInstanceId	String	Yes	eip-bp13e9i2qst4g6jzi35tc	The ID of the EIP. To query the EIP ID, call DescribeEipAddresses.
RegionId	String	Yes	cn-hangzhou	The ID of the region where the shared-bandwidth instance is located. To query the region ID, call DescribeRegions.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	RemoveGlobalAccelerationInstanceIp	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=RemoveGlobalAccelerationInstanceIp
&GlobalAccelerationInstanceId=ga-m5ex47zwyalseljynidhms
&IpInstanceId=eip-bp13e9i2qst4g6jzi35tc
&RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

XML format

```
{
  "RequestId": "01FDDD49-C4B7-4D2A-A8E5-A93915C450A6"
}
```

JSON format

```
{
  "RequestId": "01FDDD49-C4B7-4D2A-A8E5-A93915C450A6"
}
```

```
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
404	InvalidBandwidthPackageId.NotFound	The specified bandwidthPackageId does not exist in our records.	The specified shared bandwidth package does not exist.

[See common error codes](#)

16 Internet Shared Bandwidth

16.1 DescribeCommonBandwidthPackages

Query Internet Shared Bandwidth instances in a region.

Request parameters

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: <code>DescribeCommonBandwidthPackages</code>
RegionId	String	Yes	The ID of the region where the Internet Shared Bandwidth instance is located. You can obtain the region ID by calling the <code>DescribeRegions</code> API.
BandwidthPackageId	String	Yes	The ID of the Internet Shared Bandwidth instance.
PageNumber	Integer	No	The number of pages to return. The default value is <code>1</code> .
PageSize	Integer	No	The number of rows per page. The maximum value is <code>50</code> and the default value is <code>10</code> .

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 rows per page.

Name	Type	Description
CommonBandwidthPackages	List	A list of Internet Shared Bandwidth instances.

Table 16-1: CommonBandwidthPackage

Name	Type	Description
BandwidthPackageId	String	The ID of the Internet Shared Bandwidth instance.
Name	String	The name of the Internet Shared Bandwidth instance.
Description	String	The description of the Internet Shared Bandwidth instance.
Bandwidth	Integer	The peak bandwidth of the Internet Shared Bandwidth instance.
InternetChargeType	String	The billing method of the Internet Shared Bandwidth instance. - PayBy95 : Pay by classic 95th percentile pricing. - PayByBandwidth : Pay by bandwidth.
BusinessStatus	String	The business status of the Internet Shared Bandwidth instance. - Normal : normal - FinancialLocked : Locked because the instance is overdue

Table 16-2: PublicIpAddresses

Name	Type	Description
IpAddress	String	The address of the EIP.

Name	Type	Description
Allocation Id	String	The ID of the EIP instance.

Examples

Request example

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

Response example

JSON format

```
{
  "DescribeCommonBandwidthPacketsResponse": {
    "PageNumber": 1,
    "TotalCount": 1,
    "PageSize": 10,
    "RequestId": "20E6FD1C-7321-4DAD-BDFD-EC8769E4AA33",
    "CommonBandwidthPackets": {
      "CommonBandwidthPackage": {
        "ZoneId": "cn-hangzhou-d",
        "InternetChargeType": "PayByBandwidth",
        "Name": "abc",
        "CreationTime": "2017-06-28T06:39:20Z",
        "Status": "Available",
        "BandwidthPackageId": "cbwp-bp1vevu8h3ieh5xkcdhdy",
        "BusinessStatus": "Normal",
        "RegionId": "cn-hangzhou",
        "Ratio": 100,
        "InstanceChargeType": "PostPaid",
        "PublicIpAddresses": {
          "PublicIpAddress": [
            {
              "IpAddress": "116.62.129.250",
              "AllocationId": "eip-bp13e9i2qst4g6jzi35tc"
            }
          ]
        },
        "Bandwidth": 20
      }
    }
  }
}
```

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DescribeCommonBandwidthPacketsResponse>
  <PageNumber>1</PageNumber>
  <TotalCount>1</TotalCount>
  <PageSize>10</PageSize>
  <RequestId>20E6FD1C-7321-4DAD-BDFD-EC8769E4AA33</RequestId>
```

```

    < CommonBand widthPacka ges >
      < CommonBand widthPacka ge >
        < Descriptio n />
        < ZoneId > cn - hangzhou - d </ ZoneId >
        < InternetCh argeType > PayByBandw idth </ InternetCh
argeType >
        < Name > abc </ Name >
        < CreationTi me > 2017 - 06 - 28T06 : 39 : 20Z </
CreationTi me >
        < Status > Available </ Status >
        < BandwidthP ackageId > cbwp - bp1vevu8h3 ieh5xkcdhd y
</ BandwidthP ackageId >
        < BusinessSt atus > Normal </ BusinessSt atus >
        < RegionId > cn - hangzhou </ RegionId >
        < Ratio > 100 </ Ratio >
        < InstanceCh argeType > PostPaid </ InstanceCh argeType
>
        < PublicIpAd dresses >
          < PublicIpAd dresse >
            < IpAddress > 116 . 62 . 129 . 250 </ IpAddress >
            < Allocation Id > eip - bp13e9i2qs t4g6jzi35t c
</ Allocation Id >
          </ PublicIpAd dresse >
        </ PublicIpAd dresses >
        < Bandwidth > 20 </ Bandwidth >
      </ CommonBand widthPacka ge >
    </ CommonBand widthPacka ges >
  </ DescribeCo mmonBandwi dthPackage sResponse >

```

16.2 ModifyCommonBandwidthPackageAttribute

Modifies the name and description of an Internet Shared Bandwidth instance.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ModifyComm onBandwidt hPackageAt tribute	The name of this action. Value: ModifyComm onBandwidt hPackageAt tribute
BandwidthP ackageId	String	Yes	cbwp- 2ze2ic1xd2 qeqk145pn4u	The ID of the Internet Shared Bandwidth instance.

Parameter	Type	Required?	Example value	Description
RegionId	String	Yes	cn-hangzhou	The ID of the region where the Internet Shared Bandwidth instance is located. To query the region ID, call DescribeRegions.
Description	String	No	0Description	The description of the Internet Shared Bandwidth instance. The description must be 2 to 256 characters in length. It must start with a letter, but cannot start with <code>http://</code> or <code>https://</code> .
Name	String	No	test123	The name of the Internet Shared Bandwidth instance. The name must be 2 to 128 characters in length and can contain letters, numbers, periods (.), underscores (_), or hyphens (-). The name must start with a letter, but cannot start with <code>http://</code> or <code>https://</code> .

Response parameters

Parameter	Type	Example value	Description
RequestId	String	B450CAD8-50BC-4506-ADA7-35C6CE63E96B	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?BandwidthPackageId=cbwp-2ze2ic1xd2-qeqk145pn4-u&RegionId=cn-hangzhou&<CommonParameters>
```

Response example

XML format

```
<ModifyBandwidthPackageAttributeResponse>
  <RequestId>B450CAD8-50BC-4506-ADA7-35C6CE63E9-6B</RequestId>
</ModifyBandwidthPackageAttributeResponse>
```

JSON format

```
{
  "RequestId": "B450CAD8-50BC-4506-ADA7-35C6CE63E9-6B"
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
404	InvalidBandwidthPackageId.NotFound	The specified bandwidthPackageId does not exist in our records.	The specified Internet Shared Bandwidth does not exist.
400	InvalidParameter.Name.Malformed	The specified Name is not valid.	The name is invalid.
400	InvalidParameter.Description.Malformed	The specified Description is not valid.	The description is invalid.

[See common error codes](#)

16.3 CreateCommonBandwidthPackage

Creates an Internet Shared Bandwidth instance.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreateCommonBandwidthPackage	The name of this action. Value: CreateCommonBandwidthPackage
Bandwidth	Integer	Yes	5	The peak bandwidth in Mbps of the Internet Shared Bandwidth instance.
RegionId	String	Yes	cn-hangzhou	The ID of the region where the Internet Shared Bandwidth is located. To query the region ID, call DescribeRegions.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.

Parameter	Type	Required?	Example value	Description
Description	String	No	Description	The description of the Internet Shared Bandwidth. The description must be 2 to 256 characters in length. It must start with a letter, but cannot start with <code>http://</code> or <code>https://</code>.
InternetChargeType	String	No	PayByBandwidth	The billing method of the Internet Shared Bandwidth. Valid values: <code>PayByBandwidth</code> (default): Pay by bandwidth <code>PayBy95</code> : Pay by classic 95th percentile pricing.
Name	String	No	test123	The name of the Internet Shared Bandwidth. The name must be 2 to 128 characters in length and can contain letters, numbers, periods (.), underscores (_), or hyphens (-). The name must start with a letter, but cannot start with <code>http://</code> or <code>https://</code>.

Parameter	Type	Required?	Example value	Description
Ratio	Integer	No	100	The minimum percentage of the Internet Shared Bandwidth . Value range: 10 to 100 (that is, the range of the minimum percentage is 10% to 100%). This parameter is required when the PayBy95 billing method is selected.
ResourceGroupId	String	No	rg-acfmxb4p6aiy	The ID of the resource group.

Request parameters

Parameter	Type	Example value	Description
BandwidthPackageId	String	cbwp-bp1vevu8h3ieh5xkcdhdy	The ID of the Internet Shared Bandwidth instance.
RequestId	String	FF39F653-033E-4CD9-9EDF-3CCA5A71FBC3	The ID of the request.
ResourceGroupId	String	rsFAF424324-033E	The ID of the resource group.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=CreateCommonBandwidthPackage
&Bandwidth=5
&RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

XML format

```
<CreateCommonBandwidthPackageResponse>
  <BandwidthPackageId>cbwp-bp1vevu8h3ieh5xkcdhdy</BandwidthPackageId>
  <RequestId>FF39F653-033E-4CD9-9EDF-3CCA5A71FBC3</RequestId>
```

```
</ CreateComm onBandwidth hPackageRe sponse >
```

JSON format

```
<{
  " BandwidthP ackageId ":" cbwp - bp1vevu8h3 ieh5xkcdhd y ",
  " RequestId ":" FF39F653 - 033E - 4CD9 - 9EDF - 3CCA5A71FB C3 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
400	MissingParameter	Miss mandatory parameter.	Required parameters are missing.
404	InvalidZoneId.NotFound	Specified value of ZoneId is not exists.	The specified zone does not exist.
400	InvalidParameter.Name.Malformed	The specified Name is not valid.	The name is invalid.
400	InvalidParameter.Description.Malformed	The specified Description is not valid.	The description is invalid.

[See common error codes](#)

16.4 AddCommonBandwidthPackageIp

Adds an EIP to an Internet Shared Bandwidth instance.

Note the following before you call this action:

- Only Pay-As-You-Go EIPs can be added.
- The EIP and the Internet Shared Bandwidth instance must be in the same region.

Debug

Use [API Explorer](#) to perform debug operation and generate code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	AddCommonBandwidthPackageIp	The name of this action. Value: AddCommonBandwidthPackageIp.
BandwidthPackageId	String	Yes	cbwp-2ze2ic1xd2qeqxxxxxxxx	The ID of the Internet Shared Bandwidth instance.
IpInstanceId	String	Yes	eip-2zeerraiwb7uxxxxxxxx	The ID of the EIP instance. To query the ID of the EIP instance, call DescribeEipAddresses .
RegionId	String	Yes	cn-hangzhou	The ID of the region where the Internet Shared Bandwidth instance is located. To query the region ID, call DescribeRegions .

Response parameters

Parameter	Type	Example value	Description
RequestId	String	EC0A01C5-62E2-4E50-B558-CDAA09094B96	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=AddCommonBandwidthPackageIp
&BandwidthPackageId=cbwp-2ze2ic1xd2qeqxxxxxxxxx
&IpInstanceId=eip-2zeerraiwb7ujxxxxxxxxx
&RegionId=cn-hangzhou
```

```
&< CommonParameters >
```

Response example

XML format

```
< AddCommonBandwidthPackageResponse >
  < RequestId > 01FDDD49 - C4B7 - 4D2A - A8E5 - A93915C450 A6 </
    RequestId >
</ AddCommonBandwidthPackageResponse >
```

JSON format

```
{
  "RequestId": "01FDDD49 - C4B7 - 4D2A - A8E5 - A93915C450 A6 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
404	InvalidBandwidthPackageId.NotFound	The specified bandwidthPackageId does not exist in our records.	The specified Internet Shared Bandwidth does not exist.

[See common error codes](#)

16.5 DeleteCommonBandwidthPackage

Deletes an Internet Shared Bandwidth instance.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteComm onBandwidt hPackage	The name of this action. Value: DeleteComm onBandwidt hPackage
BandwidthP ackageId	String	Yes	cbwp- 2ze2ic1xd2 qeqk145pn4u	The ID of the Internet Shared Bandwidth instance.
RegionId	String	Yes	cn-hangzhou	The ID of the region where the Internet Shared Bandwidth instance is located. To query the region ID, call DescribeRegions.
Force	Boolean	No	false	Indicates whether to forcibly delete the Internet Shared Bandwidth instance. Valid values: · false : Does not forcibly delete the Internet Shared Bandwidth instance if it contains EIP. · true : Forcibly remove all EIPs in the Internet Shared Bandwidth instance and then delete the Internet Shared Bandwidth instance.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	B400EF57-60E3 -4D61-B8FB- 7FA8F72DF5A6	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DeleteCommonBandwidthPackage
&BandwidthPackageId=cbwp-2ze2ic1xd2-qeqk145pn4-u
&RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

XML format

```
<DeleteCommonBandwidthPackageResponse>
  <RequestId>B400EF57-60E3-4D61-B8FB-7FA8F72DF5A6</
  RequestId>
</DeleteCommonBandwidthPackageResponse>
```

JSON format

```
{
  "RequestId": "B400EF57-60E3-4D61-B8FB-7FA8F72DF5A6"
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.

[See common error codes](#)

16.6 ModifyCommonBandwidthPackageSpec

Modifies the peak bandwidth of an Internet Shared Bandwidth instance.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ModifyCommonBandwidthPackageSpec	The name of the action. Value: ModifyCommonBandwidthPackageSpec
Bandwidth	Integer	Yes	100	The peak bandwidth in Mbps of the Internet Shared Bandwidth instance.
BandwidthPackageId	String	Yes	cbwp-2ze2ic1xd2-qeqk145pn4u	The ID of the Internet Shared Bandwidth instance.
RegionId	String	Yes	cn-hangzhou	The ID of the region where the Internet Shared Bandwidth instance is located. To query the region ID, call DescribeRegions.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	7F129000-F929-4AF5-BE8D-BAE434C795306	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=ModifyCommonBandwidthPackageSpec
&Bandwidth=100
&BandwidthPackageId=cbwp-2ze2ic1xd2-qeqk145pn4u
&RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

XML format

```
< ModifyComm onBandwidth hPackageSp ecResponse >
  < RequestId > 7F129000 - F929 - 4AF5 - BE8D - BAE434C795 30 </
    RequestId >
</ ModifyComm onBandwidth hPackageSp ecResponse >
```

JSON format

```
{
  "RequestId ":" 7F129000 - F929 - 4AF5 - BE8D - BAE434C795 306 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
404	InvalidBandwidth.ValueNotSupported	The specified value of Bandwidth not supported.	The specified peak bandwidth value is not supported.
404	BandwidthPackage.FinancialLocked	The specified BandwidthPackage has been Financial Lock.	The specified Internet Shared Bandwidth is locked due to an insufficient balance.

[See common error codes](#)

16.7 RemoveCommonBandwidthPackageIp

Removes an EIP from an Internet Shared Bandwidth instance.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	RemoveComm onBandwidth hPackageIp	The name of this action. Value: RemoveComm onBandwidth hPackageIp
BandwidthP ackageId	String	Yes	cbwp- 2ze2ic1xd2 geqk145pn4u	The ID of the Internet Shared Bandwidth instance.
IpInstance Id	String	No	eip-2zeerraiwb 7uj6i0d0fo3	The ID of the EIP instance. To query the ID of the EIP instance, call DescribeEipAddresses.
RegionId	String	Yes	cn-hangzhou	The ID of the region where the Internet Shared Bandwidth instance is located. To query the region ID, call DescribeRegions.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	0876DAB2-6A86 -479B-96BC- C5A2458568D2	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=RemoveComm onBandwidth  
hPackageIp  
&BandwidthP ackageId=cbwp-2ze2ic1xd2 geqk145pn4 u  
&IpInstance Id=eip-2zeerraiwb 7uj6i0d0fo 3  
&RegionId=cn-hangzhou
```

```
&< CommonParameters >
```

Response example

XML format

```
< RemoveCommonBandwidthPackageResponse >  
  < RequestId > 0876DAB2 - 6A86 - 479B - 96BC - C5A2458568 D2 </  
    RequestId >  
</ RemoveCommonBandwidthPackageResponse >
```

JSON format

```
{  
  "RequestId": "0876DAB2 - 6A86 - 479B - 96BC - C5A2458568 D2 "  
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.
404	InvalidBandwidthPackageId.NotFound	The specified bandwidthPackageId does not exist in our records.	The specified Internet Shared Bandwidth instance does not exist.

[See common error codes](#)

16.8 CancelCommonBandwidthPackageBandwidth

Cancels the bandwidth limit that is configured for an EIP added to an Internet Shared Bandwidth.

After you cancel the bandwidth limit, the peak bandwidth of the EIP is the same as that of the Internet Shared Bandwidth.

Debug

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

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CancelCommonBandwidthPackageIpBandwidth	The name of this action. Value: CancelCommonBandwidthPackageIpBandwidth.
BandwidthPackageId	String	Yes	cbwp-bp13d0m4e2qv8xxxxxxxx	The ID of the Internet Shared Bandwidth instance.
EipId	String	Yes	eip-2zewysoansu0sxxxxxxxx	The ID of the EIP instance added to the Internet Shared Bandwidth.
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the Internet Shared Bandwidth belongs. To query the region ID, call DescribeRegions .

Response parameters

Parameter	Type	Example value	Description
RequestId	String	63D187BF-A30A-4DD6-B68D-FF182C96D8A2	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=CancelCommonBandwidthPackageIpBandwidth
&BandwidthPackageId=cbwp-bp13d0m4e2qv8xxxxxxxxx
&EipId=eip-2zewysoansu0sxxxxxxxxx
&RegionId=cn-hangzhou
&<CommonParameters>
```

Response example

XML format

```
< CancelComm onBandwidth hPackageIp Bandwidth >
  < RequestId > 63D187BF - A30A - 4DD6 - B68D - FF182C96D8 A2 </
    RequestId >
</ CancelComm onBandwidth hPackageIp Bandwidth >
```

JSON format

```
{
  "RequestId ":" 63D187BF - A30A - 4DD6 - B68D - FF182C96D8 A2 "
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.

[See common error codes](#)

16.9 ModifyCommonBandwidthPackageIpBandwidth

Configures the bandwidth limit for an EIP added to an Internet Shared Bandwidth.

After this function is used, the bandwidth limits of EIPs added to an Internet Shared Bandwidth can be flexibly allocated.

For example, if two EIPs are added to an Internet Shared Bandwidth of 800 Mbps, you can set the bandwidth limit of the first EIP to 500 Mbps, and set the bandwidth limit of the other EIP to 400 Mbps. After the configuration is complete, the available bandwidth of the first EIP does not exceed 500 Mbps, and the available bandwidth of the second EIP does not exceed 400 Mbps.

Debug

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

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ModifyCommonBandwidthPackageIpBandwidth	The name of this action. Value: ModifyCommonBandwidthPackageIpBandwidth.
Bandwidth	String	Yes	500	The maximum bandwidth that can be allocated from the Internet Shared Bandwidth. Unit: Mbps.
BandwidthPackageId	String	Yes	cbwp-2zep6hw5d6y8xxxxxxxxx	The ID of the Internet Shared Bandwidth instance.
EipId	String	Yes	eip-2zewysoansu0xxxxxxxxx	The ID of the EIP added to the Internet Shared Bandwidth.
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the Internet Shared Bandwidth belongs. To query the region ID, call DescribeRegions .

Response parameters

Parameter	Type	Example value	Description
RequestId	String	63D187BF-A30A-4DD6-B68D-FF182C96D8A2	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=ModifyCommonBandwidthPackageIpBandwidth
&Bandwidth=500
&BandwidthPackageId=cbwp-2zep6hw5d6y8xxxxxxxxx
&EipId=eip-2zewysoansu0xxxxxxxxx
```

&< CommonParameters >

Response example

XML format

```
< ModifyComm onBandwidth hPackageIp Bandwidth >
  < RequestId > 63D187BF - A30A - 4DD6 - B68D - FF182C96D8 A2 </
    RequestId >
</ ModifyComm onBandwidth hPackageIp Bandwidth >
```

JSON format

```
{
  "RequestId ":" 63D187BF - A30A - 4DD6 - B68D - FF182C96D8 A2 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.

[See common error codes](#)

17 EIP

17.1 AllocateEipAddress

Creates an Elastic IP Address (EIP).

After you call this action, an EIP in the Available state is allocated in the specified region. EIP supports ICMP, TCP, and UDP protocols, but does not support the IGMP and SCTP protocols.

Debug

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

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	AllocateEipAddress	The name of this action. Value: AllocateEipAddress
RegionId	String	Yes	cn-hangzhou-d	The ID of the region to which the EIP belongs. To query the region ID, call DescribeRegions .
AutoPay	Boolean	No	false	Optional. Indicates whether to pay automatically. Valid values: - false: Do not enable automatic payment. You need to go to the order center to complete the payment after an order is generated. - true: Enable automatic payment. The order is paid automatically.

Parameter	Type	Required?	Example value	Description
Bandwidth	String	No	5	Optional. The peak bandwidth of the EIP. Unit: Mbit/s. Default value: 5
ClientToken	String	No	02fb3da4-130e-11e9-8e44-001xxxxxxxxx	Optional. A client token used to guarantee the idempotence of the request. This parameter value is generated by the client and is guaranteed to be unique among different requests. It is 1 to 64 ASCII characters in length.
ISP	String	No	BGP	Optional. The type of the line. Default value: BGP. - If you have enabled a single-line bandwidth whitelist, you can set the ISP parameter to ChinaTelecom, ChinaUnicom or ChinaMobile to enable a single-line EIP provided by China Telecom, China Unicom, and China Mobile respectively. - This parameter is required if you are a financial cloud user and select the Hangzhou region. Value: BGP_FinanceCloud
InstanceChargeType	String	No	PostPaid	Optional. The billing method of the EIP. Valid values: PostPaid (default): Pay-As-You-Go.

Parameter	Type	Required ?	Example value	Description
InternetChargeType	String	No	PayByBandwidth	The billing method of the EIP. Valid values: PayByTraffic: The EIP is billed based on traffic.
Netmode	String	No	Public	Optional. The network type. Default value: Public
Period	Integer	No	10	Optional. The validity period of subscription. - If the value of PricingCycle is Month, the value range of Period is 1 to 9. - If the value of PricingCycle is Year, the value range of Period is 1 to 3.
PricingCycle	String	No	Month	The billing cycle of purchase. Valid values: - Month (default): billing on a monthly basis - Year: billing on a yearly basis
ResourceGroupId	String	No	rg-acfmxazxxx xxxxxx	The ID of the enterprise resource group.

Response parameters

Parameter	Type	Example value	Description
EipAddress	String	12.xx.xx.78	The allocated EIP.
AllocationId	String	eip-25877c70xx xxxxxxx	The ID of the EIP.

Parameter	Type	Example value	Description
OrderId	Long	10	The order number, which is returned only when InstanceChargeType is set to PrePaid.
RequestId	String	4EC47282-1B74-4534-BD0E-403F3EE64CAF	The request ID.
ResourceGroupId	String	rg-acfmxazxxx xxxxx	The ID of the enterprise resource group.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=AllocateEipAddress
&RegionId=cn-beijing
&CommonParameters
```

Response examples

XML format

```
<AllocateEipAddressResponse>
  <AllocationId>eip-25877c70xxxxxx</AllocationId>
  <EipAddress>123.xx.xx.206</EipAddress>
  <RequestId>B6B9F518-60F8-4D81-9242-1207B356754D</
RequestId>
</AllocateEipAddressResponse>
```

JSON format

```
{
  "RequestId": "B6B9F518-60F8-4D81-9242-1207B356754D",
  "EipAddress": "123.xx.xx.206",
  "AllocationId": "eip-25877c70xxxxxx"
}
```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbidden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource.
400	QuotaExceeded. Eip	Elastic IP address quota exceeded	The quota of EIPs has been reached. To increase the quota, open a ticket . Alternatively, we recommend that you use NAT Gateway to obtain more IP addresses.
400	InvalidParameter	Specified value of "InternetChargeType" is not valid	The value of the InternetChargeType parameter is invalid.
400	InvalidParameter	Specified value of "Bandwidth" is not valid.	The specified bandwidth value is invalid.
400	QuotaExceeded. Eip	Elastic IP address quota exceeded.	The quota of EIPs has been reached. To increase the quota, open a ticket . Alternatively, we recommend that you use NAT Gateway to obtain more IP addresses.
400	ReserveIpFail	Reserve eip failed.	The operation failed to reserve the EIP.
400	InvalidRegion. NotSupport	The specified region does not support.	The specified region does not support this operation .

[See common error codes.](#)

17.2 AssociateEipAddress

Associates an EIP with a cloud product instance in the same region.

Note the following when you call this action:

- You can associate an EIP with a VPC ECS instance, a VPC SLB instance, or a NAT Gateway in the same region.
- To associate an EIP with a NAT Gateway, make sure that there was no NAT bandwidth package under your account before January 26, 2018. Otherwise open a ticket to associate the EIP with the NAT Gateway.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	AssociateEipAddress	The name of this action. Value: AssociateEipAddress.
AllocationId	String	Yes	eip-2zeerraiwb7ujxxxxxxxx	The ID of the EIP.
InstanceId	String	Yes	i-2zebb08phyCZxxxxxxxx	The ID of the instance to associate.
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the EIP belongs.
InstanceRegionId	String	No	cn-hangzhou	The ID of the region to which the associated instance belongs.
InstanceType	String	No	EcsInstance	The type of the cloud product instance to associate. Valid values: Nat SlbInstance EcsInstance NetworkInterface.
Mode	String	No	NAT	The mode of associating. Valid values: NAT MULTI_BINDED.

Parameter	Type	Required?	Example value	Description
PrivateIpAddress	String	No	192.xx.xx.4	An IP address in the CIDR block of the VSwitch. If you leave the option empty, the system allocates a private IP address according to the VPC ID and VSwitch ID.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	C0FD0EED-F90D-4479-803D-DD62335357E5	The ID of the request.

Examples

Request example

```
http ( s ) : // vpc . aliyuncs . com / ? Action = AssociateE
ipAddress
& Allocation Id = eip - 2zeerraiwb 7ujxxxxxxx x
& InstanceId = i - 2zebb08phy czxxxxxxx
&< CommonParameters >
```

Response example

XML format

```
< AssociateE ipAddressResponse >
  < RequestId > 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 </
  RequestId >
</ AssociateE ipAddressResponse >
```

JSON format

```
{
  "RequestId ":" 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidAssociation. Duplicated	Specified instance already is associated.	This instance is already associated with an EIP or a Global Acceleration instance. You must delete this instance before you can associate it with a different EIP or Global Acceleration instance.
400	OperationDenied	Specified instance is not in VPC.	The specified instance does not exist in the VPC.
400	InvalidParameter. Mismatch	Specified elastic IP address and ECS instance are not in the same region.	The specified EIP and ECS instance are not in the same region.
400	IncorrectEipStatus	Current elastic IP status does not support this operation	The current status of the specified EIP address does not support this operation.
404	InvalidInstanceId. NotFound	Specified instance does not exist.	The specified instance does not exist.
400	IncorrectInstanceStatus	Current instance status does not support this operation.	The current instance status does not support this operation.
400	InvalidInstanceType. ValueNotSupported	The specified value of InstanceType is not supported.	The value of the InstanceType parameter is invalid.
400	IncorrectHaVipStatus	HaVip can be operated by this action only when it's status is Available or InUse.	You can perform this operation only if the HAVIP is the Available or InUse state.
400	InvalidParameter	The specified parameter is not valid.	The specified parameter value is invalid.

HTTP status code	Error code	Error message	Description
400	OperationDenied	Eip of default vpc not allow this operation	The EIP of the default VPC does not support this operation.
400	Forbbiden	The eip instance owener error	You need to be authorized to call the EIP. Please check that you have the appropriate permissions and try again.
400	InvalidBindingStatus	The eip binding status invalid.	The associating status of the EIP is invalid.
400	BIND_INSTANCE_HAVE_PORTMAP_OR_BIND_EIP	The instance may have portMap or already bind eip.	You must delete the existing port forwarding rule associated with the ECS instance first.
400	BIND_INSTANCE_OWENER_ERROR	Cannot operate the eip.	You cannot operate this EIP.
404	InvalidAllocationId.NotFound	Specified allocation ID is not found	The specified public IP address does not exist.
400	InvalidParams.NotFound	instance not found	The specified instance does not exist.

[See common error codes](#)

17.3 ModifyEipAddressAttribute

Modifies the name, description, and peak bandwidth of an EIP.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK example codes, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ModifyEipAddressAttribute	The value of this action. Value: ModifyEipAddressAttribute
AllocationId	String	Yes	eip-2zeerraiwb7uj6i0d0fo3	The ID of the EIP.
RegionId	String	Yes	cn-hangzhou	The ID of the region where the VPC that the route table belongs to is located.
Bandwidth	String	No	100	The peak bandwidth of the EIP. Unit: Mbps.
Description	String	No	Description	The description of the EIP. The description must be 2 to 256 characters in length. It must start with a letter but cannot start with <code>http://</code> or <code>https://</code> .
Name	String	No	Test123	The name of the EIP. The name must be 2 to 128 characters in length and can contain letters, numbers, periods (.), underscores (_), or hyphens (-). The name must start with a letter. It cannot start with <code>http://</code> or <code>https://</code> .

Response parameters

Parameter	Type	Example value	Description
RequestId	String	4EC47282-1B74-4534-BD0E-403F3EE64CAF	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=ModifyEipAddressAttribute
&AllocationId=eip-25877c70xxxxxx
&Name=eip1
&<CommonParameters>
```

Response example

• XML format

```
<ModifyEipAddressAttributeResponse>
  <RequestId>0ED8D006-F706-4D23-88ED-E11ED28DCA-C0
</RequestId>
</ModifyEipAddressAttributeResponse>
```

• JSON format

```
{
  "RequestId": "0ED8D006-F706-4D23-88ED-E11ED28DCA-C0"
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InsufficientBalance.Eip	Your account does not have enough balance.	Your account does not have a sufficient balance. Recharge your account first.
404	InvalidAllocationId.NotFound	Specified allocation ID is not found	The specified public IP address does not exist.

HTTP status code	Error code	Error message	Description
400	InvalidParameter	Specified value of "Bandwidth" is not supported.	The specified bandwidth value is invalid.
500	InternalError	The request processing has failed due to some unknown error.	An error occurred while the request was being processed.
400	IncorrectEipStatus	Current elastic IP status does not support this operation.	The current status of the specified EIP address does not support this operation.
404	InvalidAllocationId.NotFound	Specified allocation ID is not found..	The specified public IP address does not exist.
400	InvalidParameter	The parameter is invalid.	The specified parameter value is invalid.
404	Forbidden.RegionNotFound	Specified region is not found during access authentication.	The specified region does not exist.

[See common error codes](#)

17.4 DescribeEipAddresses

Queries EIPs in a region.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeEipAddresses	The name of this action. Value: DescribeEipAddresses

Parameter	Type	Required?	Example value	Description
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the EIP belongs. To query the region ID, call DescribeRegions.
AllocationId	String	No	eip-2zeerraiwb7ujxxxxxxxx	The ID of the EIP.
AssociatedInstanceId	String	No	i-2zebb08phyxxxxxxxx	The ID of the cloud resource to which the EIP is attached.
AssociatedInstanceType	String	No	EcsInstance	The cloud resource to which the EIP is bound. Valid values: - EcsInstance (default): an ECS instance of the VPC network - SlbInstance: an SLB instance of the VPC network - Nat: NAT Gateway - HaVip: HAVIP instance Each ECS and SLB instance can be attached to only one EIP. However, a NAT Gateway can be attached to multiple EIPs.
ChargeType	String	No	PostPaid	The billing method of the EIP. - PostPaid: Pay-As-You-Go. - PrePaid: Subscription.
EipAddress	String	No	116.xx.xx.28	The IP address of the EIP. After it is specified, you can view the information related to the EIP.

Parameter	Type	Required ?	Example value	Description
Filter . 1 . Key	String	No	Filter.1.Name	The filter condition to use.
Filter . 1 . Value	String	No	value1	The value of the corresponding filter condition.
Filter . 2 . Key	String	No	Filter.2. Description	The filter condition to use.
Filter . 2 . Value	String	No	value2	The value of the corresponding filter condition.
ISP	String	No	BGP	The service provider. In most cases, BGP data centers are used.
IncludeReservationData	Boolean	No	true	Indicates whether order data that has not taken effect is included. Default value: false.
LockReason	String	No	financial	The locking type. - Financial: locked because the bill is overdue. - Security: locked for security protection.
PageNumber	Integer	No	10	The number of pages to return. Default value: 1 .
PageSize	Integer	No	10	The number of rows per page. Maximum value: 50 . Default value: 10 .
ResourceGroupId	String	No	rg-acfmxazb4p xxxxxxxx	The ID of the resource group.

Parameter	Type	Required ?	Example value	Description
Status	String	No	Available	The status of the EIP. Valid values: - Associating : being attached - Unassociating : being detached - InUse : attached - Available : available

Response parameters

Parameter	Type	Example value	Description
EipAddresses	N/A	N/A	A list of EIPs.
└Allocation Id	String	eip-2zeerraiwb7ujxxxxxxxxx	The ID of the EIP.
└Allocation Time	String	2019-04-23T01:37:38Z	The time at which the EIP was created.
└AvailableRegions	N/A	cn-hangzhou	The ID of the region.
└Bandwidth	String	5	The peak bandwidth in Mbps of the EIP.
└BandwidthPackageId	String	cbwp-bp1ego3i4j07cxxxxxxxxx	The ID of the Internet Shared Bandwidth to which the EIP is added.
└BandwidthPackageType	String	CommonBandwidthPackage	The type of the Internet Shared Bandwidth.
└ChargeType	String	PayByTraffic	The billing method of the EIP.

Parameter	Type	Example value	Description
<code>└─Description</code>	String	Description	The description of the EIP.
<code>└─EipBandwidth</code>	String	101	The bandwidth of the EIP before it is added to or removed from Internet Shared Bandwidth
<code>└─ExpiredTime</code>	String	2019-04-29T02:37:38Z	The expiration time according to ISO8601 standard. UTC time must be used. Format: YYYY-MM-DDThh:mmZ.
<code>└─HdMonitorStatus</code>	String	false	Indicates whether the EIP has enabled second-level monitoring.
<code>└─HasReservationData</code>	String	wwedayhddrhht	The value is true only if the IncludeReservationData parameter is true and there is order data that has not taken effect.
<code>└─ISP</code>	String	BGP	The service provider. Usually, BGP data centers are used.
<code>└─InstanceId</code>	String	vpc-bp15zckdt37xxxxxxxxx	The ID of the instance to which the EIP is attached.
<code>└─InstanceRegionId</code>	String	cn-hangzhou	The ID of the region to which the attached resource belongs.
<code>└─InstanceType</code>	String	EcsInstance	The type of the attached instance.
<code>└─InternetChargeType</code>	String	PayByBandwidth	The billing method of the EIP.
<code>└─IpAddress</code>	String	101.xx.xx.36	The IP address of the EIP.
<code>└─Name</code>	String	EIP	The name of the EIP.

Parameter	Type	Example value	Description
<code>↳OperationLocks</code>	N/A	financial	The reason that the EIP is locked. Valid values: - financial: locked because the bill is overdue - security: locked for security protection
<code>↳LockReason</code>	String	financial	The reason that the EIP is locked. Valid values: financial: locked because the bill is overdue security: locked for security protection
<code>↳RegionId</code>	String	cn-hangzhou	The ID of the region to which the EIP belongs.
<code>↳ReservationActiveTime</code>	String	2019-03-11T16:00:00Z	The time at which the renewal takes effect.
<code>↳ReservationBandwidth</code>	String	12	The renewal bandwidth.
<code>↳ReservationInternetChargeType</code>	String	PayByBandwidth	The payment type of renewal.
<code>↳ReservationOrderType</code>	String	RENEWCHANGE	The type of the renewal order. - RENEWCHANGE: renewal change - TEMP_UPGRADE: temporary upgrade - UPGRADE: upgrade
<code>↳ResourceGroupId</code>	String	rg-acfmxazxxx xxxxxx	The ID of the resource group.

Parameter	Type	Example value	Description
Status	String	Associating	The status of the EIP. - Associating: attaching - Unassociating: detaching - InUse: attached - Available: available
TotalCount	Integer	10	The number of queried entries.
PageNumber	Integer	10	The current page number.
PageSize	Integer	10	The number of entries per page.
RequestId	String	4EC47282-1B74-4534-BD0E-403F3EE64CAF	The ID of the request.

Examples

Request example

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

Response example

• XML format

```
< DescribeEipAddresses Response >
  < RequestId > 7EEF2D6B-D207-4197-AE37-01279C888757 </
RequestId >
  < PageNumber > 1 </ PageNumber >
  < EipAddresses >
    < EipAddress >
      < ChargeType > PostPaid </ ChargeType >
      < AllocationTime > 2018-01-15T11:17:30Z </
AllocationTime >
      < ResourceGroupId > rg-acfmxyzxxx </ ResourceGr
oupId >
      < InstanceId > />
      < Description > />
      < IpAddress > 59.110.xx.xx </ IpAddress >
      < AllocationId > eip-2ze88m67qx5zxxxxx </ AllocationId
>
      < InternetChargeType > PayByTraffic </ InternetCh
argeType >
      < InstanceType > />
      < Name > />
      < Status > Available </ Status >
```

```

    < BandwidthPackageId />
    < InstanceRegionId />
    < BandwidthPackageType />
    < RegionId > cn - beijing </ RegionId >
    < OperationLocks />
    < ExpiredTime />
    < AvailableRegions >
      < AvailableRegion > cn - beijing </ AvailableRegion >
    </ AvailableRegions >
    < Bandwidth > 1 </ Bandwidth >
  </ EipAddress >
</ EipAddresses >
< TotalCount > 1 </ TotalCount >
< PageSize > 10 </ PageSize >
</ DescribeEipAddresses Response >

```

JSON format

```

{
  "DescribeEipAddresses Response ":{
    "PageNumber ":" 1 ",
    "EipAddresses ":{
      "EipAddress ":{
        "ChargeType ":" PostPaid ",
        "Status ":" Available ",
        "RegionId ":" cn - beijing ",
        "ResourceGroupId ":" rg - acfmxazxxx xxxxx ",
        "AllocationTime ":" 2018 - 01 - 15T11 : 17 : 30Z ",
        "IpAddress ":" 59 . 110 . xx . xx ",
        "AllocationId ":" eip - 2ze88m67qx 5zxxxxx ",
        "AvailableRegions ":{
          "AvailableRegion ":" cn - beijing "
        },
        "InternetChargeType ":" PayByTraffic ",
        "Bandwidth ":" 1 "
      }
    },
    "TotalCount ":" 1 ",
    "PageSize ":" 10 ",
    "RequestId ":" 7EEF2D6B - D207 - 4197 - AE37 - 01279C8887 57 "
  }
}

```

Error codes

HTTP status code	Error code	Error message	Description
404	Forbidden. RegionNotFound	Specified region is not found during access authentication.	The specified region does not exist.
404	InvalidFilterKey. NotFound		The specified key in the key/value pair of the filter is invalid.

HTTP status code	Error code	Error message	Description
404	InvalidFilterValue		The specified value in the key/value pair of the filter is invalid.
404	InvalidLockReason.NotFound	The specified LockReason is not found	The reason that the EIP is locked was not found.
400	InvalidAssociatedInstanceType.ValueNotSupported	The specified value of AssociatedInstanceType is not supported.	The specified Associated InstanceType value is invalid.
400	InvalidChargeType.ValueNotSupported	The specified ChargeType is not supported.	This billing method is not supported.

[See common error codes](#)

17.5 UnassociateEipAddress

Detaches an EIP from a cloud resource.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	UnassociateEipAddress	The name of this action. Value: UnassociateEipAddress
AllocationId	String	Yes	eip-2zeerraiwb7uj6i0d0fo3	The ID of the EIP.

Parameter	Type	Required?	Example value	Description
InstanceId	String	Yes	i-12345678	The ID of the cloud resource.
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the EIP belongs.
InstanceType	String	No	EcsInstance	The type of the cloud resource. Valid values: - EcsInstance (default): a VPC ECS instance - SlbInstance : a VPC SLB instance - Nat : NAT Gateway - HaVip : HAVIP

Response parameters

Parameter	Type	Example value	Description
RequestId	String	220F3179-5238-47F0-A0CA-1272AA2BC41F	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=UnassociateEipAddresses
&AllocationId=eip-25877c70x
&InstanceId=i-25skktcp4
&<CommonParameters>
```

Response example

• XML format

```
<UnassociateEipAddressesResponse>
  <RequestId>0ED8D006-F706-4D23-88ED-E11ED28DCA C0</RequestId>
```

```
</ Unassociat eEipAddres sResponse >
```

- JSON format

```
{
  " RequestId ":" 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	IncorrectEipStatus	Current elastic IP status does not support this operation.	The current status of the specified EIP address does not support this operation.
400	InvalidInstanceId.NotFound	Specified instance does not exist.	The specified instance does not exist.
400	IncorrectInstanceStatus	The current status of instance does not support this operation.	The current instance status does not support this operation.
400	InvalidInstanceType.ValueNotSupported	The specified value of InstanceType is not supported.	The InstanceType value is invalid.
400	IncorrectHaVipStatus	This operation is denied because satus of the specified HaVip is neither Available nor InUse.	This operation cannot be performed because the HAVIP is in the Available or InUse state.
400	OperationDenied	Eip of default vpc not allow this operation	The EIP of the default VPC does not support this operation.
404	Forbidden.RegionNotFound	Specified region is not found during access authentication.	The specified region does not exist.
400	InvalidParameter	The specified parameter is not valid.	The specified parameter value is invalid.
400	Forbbiden	The eip instance owener error	You are not authorized to call this EIP.

HTTP status code	Error code	Error message	Description
400	InvalidBindingStatus	The eip binding status invalid.	The attaching status of the EIP is invalid.

[See common error codes](#)

17.6 ReleaseEipAddress

Releases an Elastic IP Address (EIP).



Note:

Only EIPs in the Available state can be released.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ReleaseEipAddress	The name of this action. Value: ReleaseEipAddress
AllocationId	String	Yes	eip-2zeerraiwb7uj6i0d0fo3	The ID of the EIP.
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the EIP belongs.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	748C38F6-9A3D-482E-83FB-DB6C39C68AEA	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=ReleaseEip&AddressAllocationId=eip-25877c70x
&<CommonParameters>
```

Response example

- XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<ReleaseEipAddressResponse>
  <RequestId>748C38F6-9A3D-482E-83FB-DB6C39C68A-EA</RequestId>
</ReleaseEipAddressResponse>
```

- JSON format

```
{
  "RequestId": "748C38F6-9A3D-482E-83FB-DB6C39C68A-EA"
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidAllocationId.NotFound	Specified allocation ID is not found	The specified public IP address does not exist.
400	IncorrectEipStatus	Current elastic IP status does not support this operation.	The current status of the specified EIP address does not support this operation.
500	InternalError	The request processing has failed due to some unknown error.	An error occurred while the request was being processed.
404	Forbidden.RegionNotFound	Specified region is not found during access authentication.	The specified region does not exist.
400	Forbidden.ChargeTypeIsPrepaid	It's forbidden to release a prepaid EIP	The subscription EIP addresses cannot be released.

HTTP status code	Error code	Error message	Description
400	Forbidden	The eip instance owner error	You need to be authorized to use the specified EIP. Check that you have the appropriate permissions and try again.
400	TaskConflict .AssociateGlobalAccelerationInstance	Operate too frequent.	The server cannot process this many requests. Please try again later.

[See common error codes](#)

17.7 DescribeEipMonitorData

Queries the monitoring data of an EIP.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeEipMonitorData	The name of this action. Value: DescribeEipMonitorData

Parameter	Type	Required?	Example value	Description
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the EIP belongs.
AllocationId	Integer	Yes	2017-01-05T01:05:10Z	The ID of the EIP instance.

Parameter	Type	Required?	Example value	Description
StartTime	String	Yes	2017-01-05T02:05:05Z	The start time to retrieve data. This parameter takes the ISO8601 format and is output in UTC +8. Format: YYYY-MM-DDThh:mm:ssZ. If ss is not 00, the next minute is automatically used ⁴¹³ as the start

Parameter	Type	Required?	Example value	Description
EndTime	String	Yes	2017-01-05T01:05:10Z	The end time to retrieve data. This parameter takes the ISO8601 format and is output in UTC +8. Format: YYYY-MM-DDThh:mm:ssZ. If ss is not 00, the next minute is automatically used as the end

Parameter	Type	Required?	Example value	Description
Period	Integer	No	60	The time length in seconds of each point of monitoring data. Default value: 60 . Valid values: 60 600 3600  Note: The value of (EndTime - StartTime)/ Period must be larger than 200, that is, up to 200

Response parameters

Parameter	Type	Example value	Description
EipMonitorDats			A list of EIP monitoring data.
└ EipBandwidth	Integer	10	The value of the bandwidth: EipFlow/60. Unit: Bps.
└ EipFlow	Integer	675	The sum of the inbound and outbound bandwidth.
└ EipPackets	Integer	3434	The number of packets.
└ EipRX	Integer	122	The inbound bandwidth. Unit: bytes.
└ EipTX	Integer	343	The outbound bandwidth. Unit: bytes.
└ TimeStamp	String	2010-01-21T09:50:23Z	The timestamp of the query in ISO8601 format. Example value: 2018-12-20T03:14:00Z.
RequestId	String	C8B26B44-0189-443E-9816-D951F59623A9	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DescribeEipMonitorData
&AllocationId=eip-2578g5v5a
&StartTime=2014-10-29T23:00:00Z
&EndTime=2014-10-30T08:00:00Z
&CommonParameters
```

Response example

XML format

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

```

< RequestId > C8B26B44 - 0189 - 443E - 9816 - D951F59623 A9 </
RequestId >
< EipMonitor Datas >
  < EipMonitor Data >
    < EipRX > 122 </ EipRX >
    < EipTX > 343 </ EipTX >
    < EipFlow > 675 </ EipFlow >
    < EipPackets > 3434 </ EipPackets >
    < EipBandwid th > 10 </ EipBandwid th >
    < TimeStamp > 2010 - 01 - 21T09 : 50 : 23Z </ TimeStamp >
  </ EipMonitor Data >
</ EipMonitor Datas >
</ DescribeEi pMonitorDa taResponse >

```

JSON format

```

{
  " RequestId ": " C8B26B44 - 0189 - 443E - 9816 - D951F59623 A9 ",
  " EipMonitor Datas ": {
    " EipMonitor Data ": [
      {
        " EipRX ": " 122 ",
        " EipTX ": " 343 ",
        " EipFlow ": " 675 ",
        " EipPackets ": " 3434 ",
        " EipBandwid th ": " 10 ",
        " IntranetFl ow ": 675 ,
        " IntranetBa ndwidth ": 10 ,
        " TimeStamp ": " 2010 - 01 - 21T09 : 50 : 23Z "
      }
    ]
  }
}

```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidInstanceId.NotFound	The InstanceId provided does not exist in our records.	The specified ECS instance does not exist (The specified ECS instance is not under the VPC).
400	InvalidStartTime.Malformed	The specified parameter "StartTime" is not valid.	The specified start time is invalid.
400	InvalidEndTime.Malformed	The specified parameter "EndTime" is not valid.	The specified end time is invalid.
400	InvalidPeriod.ValueNotSupported	The specified parameter "Period" is not valid.	The specified period value is invalid.

HTTP status code	Error code	Error message	Description
400	InvalidStartTime. TooEarly	The specified parameter "StartTime" is too early.	The specified start time is invalid.
400	InvalidAllocationId. NotFound	Specified allocation id is not found.	The specified public IP address does not exist. Check if you have entered the correct public IP address.
400	OperationDenied. TooManyDataQueried	Specified operation is denied as too many data to return.	The operation cannot be performed because too much data is returned.
404	Forbidden. RegionNotFound	Specified region is not found during access authentication.	The specified region does not exist.

[See common error codes](#)

17.8 DescribeEipGatewayInfo

Queries the gateway address and subnet mask of an EIP.

You can only query the gateway address and subnet mask of an EIP that is associated with a secondary Elastic Network Interface (ENI) in the multi-EIP to ENI mode.

Debug

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

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeEipGatewayInfo	The name of this action. Value: DescribeEipGatewayInfo
InstanceId	String	Yes	eni-bp1d66qjxb3qoin3xxxx	The ID of the ENI with which the EIP is associated.

Parameter	Type	Required?	Example value	Description
RegionId	String	Yes	cn-zhangjiakou	The region ID of the EIP. To query the region ID, call DescribeRegions .

Response parameters

Parameter	Type	Example value	Description
Code	String	200	The status code of the request.
EipInfos			The details of the EIP.
Ip	String	47.xx.xx.236	The IP address of the EIP.
IpGw	String	47.xx.xx.1	The gateway address of the EIP.
IpMask	String	255.255.255.0	The subnet mask of the EIP.
Message	String	successful	The message indicating whether the request is successful.
RequestId	String	C0FD0EED-F90D-4479-803D-DD62335357E5	The ID of the request.

Examples

Request example

```
http ( s ) : // vpc . aliyuncs . com / ? Action = DescribeEi
pGatewayIn fo
& InstanceId = eni - bp1d66qjxb 3qoin3 ****
& RegionId = cn - zhangjiako u
&< CommonPara meters >
```

Response examples

XML format

```
< DescribeEi pGatewayIn foResponse >
< Message > successful </ Message >
```

```

    < RequestId > 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 </
RequestId >
    < EipInfos >
        < EipInfo >
            < IP > 47 . xx . xx . 236 </ IP >
            < IpMask > 255 . 255 . 255 . 0 </ IpMask >
            < IpGw > 47 . xx . xx . 1 </ IpGw >
        </ EipInfo >
    </ EipInfos >
    < Code > 200 </ Code >
</ DescribeEi pGatewayIn foResponse >

```

JSON format

```

{
  " Message ":" successful ",
  " RequestId ":" 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 ",
  " EipInfos ":{
    " EipInfo ":[
      {
        " IpMask ":" 255 . 255 . 255 . 0 ",
        " IP ":" 47 . xx . xx . 236 ",
        " IpGw ":" 47 . xx . xx . 1 "
      }
    ]
  },
  " Code ":" 200 "
}

```

Error codes

HTTP status code	Error code	Error message	Description
403	Forbbiden	User not authorized to operate on the specified resource.	You are not authorized to operate on this resource.

[See common error codes.](#)

18 Physical connection

18.1 CreatePhysicalConnection

Create a physical connection.

After the physical connection changes to the Initial status, contact the service provider for construction.

Note the following before creating a physical connection:

- The number of physical connections that are not in the Enabled status cannot exceed five.
- If there is a delinquent physical connection in your account, you cannot apply for more physical connection.

Request parameters

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: CreatePhysicalConnection
RegionId	String	Yes	The region of the physical connection. You can obtain the region ID by calling the DescribeRegions API.
AccessPointId	String	Yes	The ID of the access point used by the physical connection. You can obtain the region ID by calling the DescribeRegions API.
CircuitCode	String	No	The circuit code provided by the service provider for the physical connection.

Name	Type	Required	Description
LineOperator	String	Yes	The service provider that provides the physical connection. Valid value: - CT : China Telecom - CU : China Unicom - CM : China Mobile - CO : Others in China - Equinix : Equinix - Other : Others outside China
PeerLocation	String	Yes	The geographic location of the local data center.
BandWidth	String	No	The bandwidth in Mbps of the physical connection. The default value is 100 and the valid value is [2, 10240].
PortType	String	No	The port type of the physical connection. Valid value: 100Base - T : 100-MB electrical port 1000Base - T (default): 1-GB electrical port 1000Base - LX : 1-GB single-mode optical port (10 km) 10GBase - T : 10-GB electrical port 10GBase - LR : 10-GB single-mode optical port (10 km)
RedundantPhysicalConnectionId	String	No	The ID of the redundant physical connection. The redundant physical connection must be in the Allocated, Confirmed, or Enabled status.

Name	Type	Required	Description
Name	String	No	The name of the physical connection. The name can contain from 2 to 128 characters including a-z, A-Z, 0-9, dots, underscores, and hyphens. The name must start with an English letter, but cannot start with <code>http://</code> or <code>https://</code>.
Description	String	No	The description of the physical connection. The description can contain 2-256 characters. It must start with English letters, 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
RequestId	String	The ID of the request.
PhysicalConnectionId	String	The ID of the VPC.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=CreatePhysicalConnection
&RegionId=cn-beijing
&AccessPointId=ap-cn-beijing-ft-A
&LineOperator=CT
&PeerLocation=XXX
&CommonParameters
```

Response example

- XML format

```
<? xml version =" 1 . 0 " encoding =" UTF - 8 "? >
< CreatePhys icalConnec tionRespon se >
  < RequestId > 8A6A5EC5 - 6F6C - 4906 - 9689 - 56ACE58A13 E0 "</
  RequestId >
  < PhysicalCo nnectionId > pc -*****</ PhysicalCo
  nnectionId >
</ CreatePhys icalConnec tionRespon se >
```

- JSON format

```
{
  " PhysicalCo nnectionId ": " pc -*****",
  " RequestId ": " 8A6A5EC5 - 6F6C - 4906 - 9689 - 56ACE58A13 E0 "
}
```

18.2 CancelPhysicalConnection

Cancels physical connection access. After the cancelling, the physical connection changes to the Canceled state.

You cannot cancel a physical connection that is in the Enabled state.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CancelPhys icalConnection	The name of this action. Value: CancelPhys icalConnec tion
PhysicalCo nnectionId	String	Yes	pc-119mfjzm7	The ID of the physical connection.
RegionId	String	Yes	cn-shanghai	The region where the physical connection is located. To query the region ID, call DescribeRegions.

Parameter	Type	Required?	Example value	Description
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	4EC47282-1B74-4534-BD0E-403F3EE64CAF	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=CancelPhysicalConnection
&PhysicalConnectionId=pc-119mfjzm7
&RegionId=cn-shanghai
&<CommonParameters>
```

Response example

XML format

```
<RequestId>BE36E95A-F83E-4127-A29E-F2F35D4C999A</RequestId>
```

JSON format

```
{
  "RequestId": "BE36E95A-F83E-4127-A29E-F2F35D4C999A"
}
```

```
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidPhysicalConnectionId.NotFound	The PhysicalConnectionId provided does not exist in our records.	The specified physical connection does not exist.
400	Forbidden.NotAllowedInState	The request does not allow in this state.	The request cannot be processed because the status of the resource does not permit this action.

[See common error codes](#)

18.3 DescribePhysicalConnections

Query physical connections in a region.

Debug

Perform a [debug](#) in OpenAPI Explorer. We recommend that you use OpenAPI Explorer. By using OpenAPI Explorer, you can call APIs, generate SDK code examples automatically, and search APIs, allowing you to quickly and easily get started with using APIs on the cloud.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribePhysicalConnections	The action to perform. Valid value: DescribePhysicalConnections

Parameter	Type	Required?	Example value	Description
RegionId	String	Yes	cn-hangzhou	The ID of the region where the leased line is deployed. You can obtain the region ID by calling the DescribeRegions API.
ClientToken	String	No	23243242rggyt	Optional. It is used to guarantee the idempotence of requests. This parameter is generated by clients. It must be unique for each request and must not exceed 64 ASCII characters in length.

Parameter	Type	Required?	Example value	Description
Filter . N . Key	String	No	1	Optional. The filter conditions . Value range of N: 1 to 5. Supported filter conditions include: - PhysicalConnectionId : the ID of the physical connection - AccessPointId : the ID of the access point - Type : the type of the physical connection - LineOperator : the service provider of the leased line - Spec : the specification of the physical connection - Status : the status of the physical connection - Name : the name of the physical connection The relationship of multiple filter condition values is OR, which means that this filter condition is met when at least one of the specified value is returned. The relationship of multiple filter conditions is AND, which means a physical connection is displayed in the query result only when it meets all the specified conditions.
Filter . N . Value . N	RepeatList	No	1	Optional. Values of filter conditions. Value range of N: 1 to 5.

Parameter	Type	Required?	Example value	Description
IncludeReservationData	Boolean	No	false	Optional. Indicates whether to return invalid orders.
PageNumber	Integer	No	10	Optional. The page number of the physical connection list. Default value: 1.
PageSize	Integer	No	1	Optional. The number of rows per page. Maximum value: 50. Default value: 10.

Response parameters

Parameter	Type	Example value	Description
PhysicalConnectionSet			Details of physical connections
[⌞] AccessPointId	String	eip-2zeerraiwb7uj6i0d0fo3	The access point ID of the physical connection
[⌞] AdLocation	String	Room Ax-x, Building B, No. x of xxx Avenue, New York, US	The location where the leased line is connected
[⌞] Bandwidth	Long	10	The bandwidth of the physical connection
[⌞] BusinessStatus	String	Normal	The payment status of the physical connection. Valid values: • Normal • FinancialLocked: locked due to overdue payment • SecurityLocked: locked due to security reasons

Parameter	Type	Example value	Description
<code>ChargeType</code>	String	Prepaid	The billing method of the physical connection
<code>CircuitCode</code>	String	longtel001	The number of the leased line from the service provider
<code>CreationTime</code>	String	2017-06-08T12:20:55	The time when the physical connection is established
<code>Description</code>	String	Physical connection	A description about the physical connection
<code>EnabledTime</code>	String	2017-06-08T12:20:55	The time when the physical connection is enabled
<code>EndTime</code>	String	2019-02-25T11:01:04Z	The time when the physical connection expires
<code>HasReservationData</code>	String	true	Indicates whether subscription messages are received
<code>LineOperator</code>	String	CT	The service provider that provides the leased line. Valid values: - CT: China Telecom - CU: China Unicom - CM: China Mobile - CO: Other Chinese service providers - Equinix: Equinix - Other: Other service providers outside Mainland China
<code>LoaStatus</code>	String	Available	The status of the LOA
<code>Name</code>	String	name	The name of the physical connection

Parameter	Type	Example value	Description
<code>PeerLocation</code>	String	Zhejiang---vfjdbg_21e	The location of the on-premises IDC
<code>PhysicalConnectionId</code>	String	pc-119mfjzm7	The ID of the physical connection
<code>PortNumber</code>	String	80	The port number of the physical connection device
<code>PortType</code>	String	1000Base-T	The type of physical connection ports: • 100Base-T: 100M electrical ports • 1000Base-T (default value): Gigabit electrical ports • 1000Base-LX: Gigabit single-mode optical ports (10 km) • 10GBase-T: 10-GE electrical ports • 10GBase-LR: 10-GE single-mode optical ports (10 km)
<code>RedundantPhysicalConnectionId</code>	String	pc-119mfjzm7	The ID of the redundant physical connection
<code>ReservationActiveTime</code>	String	2019-02-25T11:01:04Z	The effective time of a renewal
<code>ReservationInternetChargeType</code>	String	PayByBandwidth	The type of renewal
<code>ReservationOrderType</code>	String	RENEW	The type of the renewal order
<code>Spec</code>	String	Large	The specification of the physical connection

Parameter	Type	Example value	Description
[⌞] Status	String	Initial	The status of the physical connection. Valid values: - Initial : The physical connection has been applied for and is under review by Alibaba Cloud. - Approved : The application is approved. - Allocating : Resources are being allocated. - Allocated : The leased line is being installed. - Confirmed : The completed leased line installation needs to be confirmed by the customer. - Enabled : The physical connection interface is enabled. - Rejected : The application is rejected. - Canceled : The application is canceled. - Allocation Failed : Failed to allocate resources. - Terminated : The physical connection is terminated.
[⌞] Type	String	VPC	The type of the physical connection. Default value: VPC .
TotalCount	Integer	10	The number of items in a list
PageNumber	Integer	10	The current page number
PageSize	Integer	10	The number of items per page
RequestId	String	EEC8EAB1-F299-4F5C-8E54-0A3129164C27	The ID of the request

Example

Request example

```
https://vpc.aliyuncs.com/?Action=DescribePhysicalConnections
&RegionId=cn-hangzhou
&<CommonParameters>
```

Response examples

XML format

```
<DescribePhysicalConnectionsResponse>
  <PageNumber>1</PageNumber>
  <TotalCount>1</TotalCount>
  <PageSize>10</PageSize>
  <RequestId>7C07B0AF-4FC0-4BB2-9667-F75812824B-CD</RequestId>
  <PhysicalConnectionSet>
    <PhysicalConnectionType>
      <Type>VPC</Type>
      <PhysicalConnectionId>pc-2zeoaxkq3j-ot5p71qcnu-y</PhysicalConnectionId>
      <PeerLocation>XXX-Road--XXX-District</PeerLocation>
      <CreationTime>2017-12-13T02:28:42Z</CreationTime>
      <Name>TEST</Name>
      <Status>Enabled</Status>
      <AdLocation>CabinetXXU-DataCenter-XXX--XXX--XX--XXX</AdLocation>
      <EnabledTime>2017-12-18T04:01:30Z</EnabledTime>
    >
    <BusinessStatus>Normal</BusinessStatus>
    <LineOperator>CT</LineOperator>
    <PortNumber>1/1/4</PortNumber>
    <AccessPointId>ap-cn-beijing-dx-A</AccessPointId>
    <PortType>100Base-T</PortType>
    <Bandwidth>2</Bandwidth>
  </PhysicalConnectionType>
</PhysicalConnectionSet>
</DescribePhysicalConnectionsResponse>
```

JSON format

```
{
  "PageNumber": 1,
  "TotalCount": 1,
  "PageSize": 10,
  "RequestId": "7C07B0AF-4FC0-4BB2-9667-F75812824B-CD",
  "PhysicalConnectionSet": {
    "PhysicalConnectionType": [
      {
        "Type": "VPC",
        "PhysicalConnectionId": "pc-2zeoaxkq3j-ot5p71qcnu-y",
        "PeerLocation": "XXRoad-XXDistrict--XXX",
        "CreationTime": "2017-12-13T02:28:42Z",

```

```
" Name ":" TEST ",
" Status ":" Enabled ",
" AdLocation ":" CabinetXXU DataCenter XX -- XXX - XX -- XXX ",
" EnabledTime ":" 2017 - 12 - 18T04 : 01 : 30Z ",
" BusinessStatus ":" Normal ",
" LineOperator ":" CT ",
" PortNumber ":" 1 / 1 / 4 ",
" AccessPointId ":" ap - cn - beijing - dx - A ",
" PortType ":" 100Base - T ",
" Bandwidth ": 2
}
]
}
}
```

Error codes

HttpCode	Error code	Error message	Description
404	InvalidFilterKey .ValueNotSupported	Specified filter key is not supported: Filter.X.key	The specified filter key , Filter.X.key, is not supported.

[Click here to view the error codes.](#)

18.4 ModifyPhysicalConnectionAttribute

Modifies the attributes of a physical connection.

Note the following before you call this action:

- If you want to modify the specification or the redundant physical connection ID, the corresponding physical connection must be in the Initial or Rejected status.
- You cannot modify the attributes of a physical connection that is in the Canceled, Allocating, AllocationFailed, or Terminated status.
- After modification, a physical connection in the Rejected status will change to the Initial status.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ModifyPhysicalConnectionAttribute	The name of this action. Value: ModifyPhysicalConnectionAttribute
PhysicalConnectionId	String	Yes	pc-119mfjzm7	The ID of the physical connection.
RegionId	String	Yes	cn-shanghai	The region where the physical connection is located. To query the region ID, call DescribeRegions.
CircuitCode	String	No	longtel001	The circuit code provided by the carrier for the physical connection.
ClientToken	String	No	efefe566754h	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.
Description	String	No	The description of the physical connection	The description of the physical connection. The description must be 2 to 256 characters in length. It must start with a letter, but cannot start with <code>http://</code> or <code>https://</code> .

Parameter	Type	Required?	Example value	Description
LineOperator	String	No	CT	The carrier that provides the physical connection. Valid values: - CT : China Telecom - CU : China Unicom - CM : China Mobile - CO : Others in China - Equinix : Equinix - Other : Others outside China
Name	String	No	The name of the physical connection	The name of the physical connection. 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. It cannot start with <code>http://</code> or <code>https://</code>.
PeerLocation	String	No	Zhejiang Province---vfjdbg_21e	The geographic location of the on-premises data center.

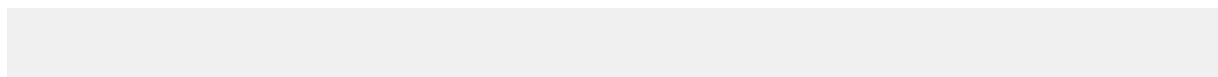
Parameter	Type	Required?	Example value	Description
PortType	String	No	E1 - 2M	The port type of the physical connection. Valid values: 100Base - T : 100 Mbps electrical port 1000Base - T (default): 1 Gbps electrical port 1000Base - LX : 1 Gbps single-mode optical port (10 km) 10GBase - T : 10 Gbps electrical port 10GBase - LR : 10 Gbps single-mode optical port (10 km)
RedundantPhysicalConnectionId	String	No	pc-119mfjzm7	The ID of the redundant physical connection. The redundant physical connection must be in the Allocated, Confirmed, or Enabled status.
Bandwidth	String	No	5	The bandwidth in Mbps of the physical connection. Value range: 2 to 10240.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	013EE132-A109-4247-91B0-099A8FF49AD7	The ID of the request.

Examples

Request example



```
https://vpc.aliyuncs.com/?Action=ModifyPhysicalConnectionAttribute
&PhysicalConnectionId=pc-119mfjzm7
&RegionId=cn-shanghai
&<CommonParameters>
```

Response example

- XML format

```
<ModifyPhysicalConnectionAttributeResponse>
  <RequestId>8A6A5EC5-6F6C-4906-9689-56ACE58A13E0</RequestId>
</ModifyPhysicalConnectionAttributeResponse>
```

- JSON format

```
{
  "RequestId": "8A6A5EC5-6F6C-4906-9689-56ACE58A13E0"
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidPhysicalConnectionId.NotFound	The PhysicalConnectionId provided does not exist in our records.	The specified physical connection does not exist.
400	InvalidPeerLocation.Malformed	The PeerLocation provided was invalid.	The value of the PeerLocation parameter is invalid.
400	InvalidPortType.Malformed	The PortType provided was invalid.	The specified port type is invalid.
400	InvalidDescription.Malformed	The specified ?Description? is not valid.	The format of the description is invalid. The source description can be 2 to 256 characters in length. It cannot start with http:// and https://.
400	InvalidName.Malformed	The specified ?Name? is not valid.	The name format is invalid.

HTTP status code	Error code	Error message	Description
400	InvalidStatus	invalid physical connection status.	The specified physical connection status is invalid.
400	InvalidBandwidth	invalid physical connection bandwidth.	The specified physical connection bandwidth is invalid.
400	InvalidRedundantPhysicalConnection	redundant physical connection doesn't belong to current user.	The specified redundant physical connection does not belong to your account.
400	InvalidRedundantPhysicalConnectionStatus	invalid redundant physical connection status .	The status of the redundant physical connection is invalid.
400	InvalidCircuitCode.Malformed	circuitCode is illegal.	The specified circuit code is invalid.

[See common error codes](#)

18.5 TerminatePhysicalConnection

Terminate the access of the physical connection after the physical connection is enabled. The physical connection changes to the Terminating status after the API is called and changes to the Terminated status when the process is completed.

Note the following before terminating a physical connection:

- You can only terminate a physical connection in the Enabled status.
- Before terminating a physical connection, you must delete the Virtual Border Routers (VBRs) associated with the physical connection.

Request parameters

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: TerminatePhysicalConnection
RegionId	String	Yes	The region of the physical connection. You can obtain the region ID by calling the DescribeRegions API.
PhysicalConnectionId	String	Yes	The ID of the physical connection.

Response parameters

Name	Type	Description
RequestId	String	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=TerminatePhysicalConnection
&PhysicalConnectionId=pc-2zeoaxkq3xxxxx
&RegionId=cn-beijing
&CommonParameters
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
  "RequestId": "513E0A50-4F2D-4CBE-BF35-40559DF65D79"
```

18.6 EnablePhysicalConnection

Enables a physical connection in the Confirmed status. After being enabled, the physical connection changes to the Enabled status.

Note the following before you call this action:

- You can only enable a physical connection in the Confirmed status.

- The physical connection changes to the Enabled status after being enabled.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	EnablePhysicalConnection	The name of this action. Value: EnablePhysicalConnection
PhysicalConnectionId	String	Yes	pc-119mfjzm7	The ID of the physical connection.
RegionId	String	Yes	cn-shanghai	The region where the physical connection is located. To query the region ID, call DescribeRegions.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	API-20365164-5b0d-460a-83c2-2189972b3349	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=EnablePhysicalConnection
&PhysicalConnectionId=pc-119mfjzm7
&RegionId=cn-shanghai
&<CommonParameters>
```

Response example

- XML format

```
<EnablePhysicalConnectionResponse>
  <RequestId>0ED8D006-F706-4D23-88ED-E11ED28DCA-C0</
  RequestId>
</EnablePhysicalConnectionResponse>
```

- JSON format

```
{
  "RequestId": "0ED8D006-F706-4D23-88ED-E11ED28DCA-C0"
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidPhysicalConnectionId.NotFound	The PhysicalConnectionId provided does not exist in our records.	The specified physical connection does not exist.
400	Forbidden.NotAllowedInState	The request does not allow in this state.	The request cannot be processed because the status of the resource does not permit this action.

[See common error codes](#)

18.7 DeletePhysicalConnection

Deletes a physical connection.

You can only delete a physical connection in the Rejected, Canceled, AllocationFailed, or Terminated status.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeletePhysicalConnection	The name of this action. Value: DeletePhysicalConnection
RegionId	String	Yes	pc-119mfjzm7	The region where the physical connection is located. To query the region ID, call DescribeRegions.
PhysicalConnectionId	String	Yes	cn-shanghai	The ID of the physical connection.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	2B3670CD-670E-4540-8C13-6DE929AEDD3B	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DeletePhysicalConnection
&PhysicalConnectionId=pc-119mfjzm7
&RegionId=cn-shanghai
&<CommonParameters>
```

Response example

- XML format

```
< DeletePhysicalConnectionResponse >
  < RequestId > 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 </
    RequestId >
</ DeletePhysicalConnectionResponse >
```

- JSON format

```
{
  "RequestId ":" 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidPhysicalConnectionId.NotFound	The PhysicalConnectionId provided does not exist in our records.	The specified physical connection does not exist.
400	Forbidden.NotAllowedInState	The request does not allow in this state.	The request cannot be processed because the status of the resource does not permit this action.
400	InvalidPhysicalConnectionId.NotMatched	instance id not matched.	The instance IDs do not match.
400	Forbidden.VBRExists	vbr owner's vbr still exists .	A VBR still exists.
400	Forbidden.AssociateToVBR	The physical connection still associate to VBR.	The physical connection is already associated with a VBR.

[See common error codes](#)

18.8 ApplyPhysicalConnectionLOA

Apply for the LOA.

Debug

Perform a [debug](#) in OpenAPI Explorer. We recommend that you use OpenAPI Explorer. By using OpenAPI Explorer, you can call APIs, generate SDK code examples automatically, and search APIs, allowing you to quickly and easily get started with using APIs on the cloud.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ApplyPhysicalConnectionLOA	The action to perform. Valid value: ApplyPhysicalConnectionLOA.
CompanyName	String	Yes	company	The name of the company that requires the physical connection.
ConstructionTime	String	Yes	2019-02-28T16:00:00.000Z	The date and time when the data cable installation technician or representative will go to the installation site.
InstanceId	String	Yes	pc-bp1qrb3044eqixxxxxxxx	The instance ID of the physical connection interface.
LineType	String	Yes	SDH	The type of leased line.
PeerLocation	String	Yes	Hangzhou	The location where the leased line is deployed.
RegionId	String	Yes	cn-hangzhou	The ID of the region to which the physical connection interface belongs.
Si	String	Yes	Alibaba Cloud	The name of the installation company.

Parameter	Type	Required ?	Example value	Description
Bandwidth	Integer	No	3	Optional. The bandwidth value of the physical connection.
ClientToken	String	No	A47BD386-7FDE-4xxx4-8D22-C62xxxxxxxxx	Optional. The token used for client authentication.
LineOperator	String	No	CU	Optional. The service provider that provides the leased line.
PMInfo . N . PMCertificateNo	String	No	3210xxxxxx xxxxxxxx	Optional. The license number of the certificate held by the data cable installation technician or representative.
PMInfo . N . PMCertificateType	String	No	IDCard	Optional. The type of the certificate that the data cable installation technician or representative holds.
PMInfo . N . PMContactInfo	String	No	13200000000	Optional. The contact information of the data cable installation technician or representative.
PMInfo . N . PMGender	String	No	Male	Optional. The gender of the data cable installation technician or representative.
PMInfo . N . PMName	String	No	Mike	Optional. The name of the data cable installation technician or representative.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	A47BD386-7FDE-42C4-8D22-C6223D18AA1C	The ID of the request.

Examples**Request example**

```
http ( s )://[ Endpoint ]/? CompanyName = company
& ConstructionTime = 2019 - 02 - 28T16 : 00 : 00 . 000Z
& InstanceId = pc - bp1qrb3044 eqixxxxxxx x
& LineType = SDH
& PeerLocation = Hangzhou
& RegionId = cn - hangzhou
& Si = Alibaba Cloud
&< CommonParameters >
```

Response examples**XML format**

```
< ApplyPhysicalConnectionLOA >
  < code > 200 </ code >
  < httpStatus Code > 200 </ httpStatus Code >
  < message > successful </ message >
  < requestId > A47BD386 - 7FDE - 42C4 - 8D22 - C6223D18AA 1C </
requestId >
  < success > true </ success >
</ ApplyPhysicalConnectionLOA >
```

JSON format

```
{
  " message ":" successful ",
  " httpStatus Code ": 200 ,
  " requestId ":" A47BD386 - 7FDE - 42C4 - 8D22 - C6223D18AA 1C ",
  " code ":" 200 ",
  " success ": true
}
```

Error codes

[Click here to view the error codes.](#)

18.9 CompletePhysicalConnectionLOA

Report information about the completed installation of the leased line.

Debug

Perform a [debug](#) in OpenAPI Explorer. We recommend that you use OpenAPI Explorer. By using OpenAPI Explorer, you can call APIs, generate SDK code examples automatically, and search APIs, allowing you to quickly and easily get started with using APIs on the cloud.

Request parameters

Parameter	Type	Required ?	Example value	Description
Action	String	Yes	CompletePhysicalConnectionLOA	The action to perform. Valid value: CompletePhysicalConnectionLOA.
InstanceId	String	Yes	pc-bp10tvlnwkwxxxxxxxxxx	The instance ID of the physical connection interface.
LineCode	String	Yes	aaa111	The number of the leased line.
LineLabel	String	Yes	bbb222	The label numbers of cables at the installation site.
RegionId	String	Yes	cn-hangzhou	The ID of the region where the leased line is deployed.
ClientToken	String	No	F8983C74-E068-4509-B442-89xxxxxC8F43B	Optional. The token used for client authentication.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	F8983C74-E068-4509-B442-89BD82C8F43B	The ID of the request.

Examples

Request example

```
http ( s )://[ Endpoint ]/? InstanceId = pc - bp10tvlnhw  kwxxxxxxxxx
xx
& LineCode = aaa111
& LineLabel = bbb222
& RegionId = cn - hangzhou
&< CommonPara meters >
```

Response examples

XML format

```
< CompletePhysicalConnectionLOA >
  < code > 200 </ code >
  < message > successful </ message >
  < requestId > 5FA3B04E - AEA0 - 4F89 - BF0D - 3FD71ED69B F7 </
requestId >
  < success > true </ success >
</ CompletePhysicalConnectionLOA >
```

JSON format

```
{
  " message ":" successful ",
  " requestId ":" 5FA3B04E - AEA0 - 4F89 - BF0D - 3FD71ED69B F7 ",
  " code ":" 200 ",
  " success ": true
}
```

Error codes

[Click here to view the error codes.](#)

18.10 CreatePhysicalConnectionOccupancyOrder

Create an order for the initial installation fee.

Debug

Perform a [debug](#) in OpenAPI Explorer. We recommend that you use OpenAPI Explorer. By using OpenAPI Explorer, you can call APIs, generate SDK code examples automatically, and search APIs, allowing you to quickly and easily get started with using APIs on the cloud.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreatePhysicalConnectionOccupancyOrder	The action to perform. Valid value: CreatePhysicalConnectionOccupancyOrder.
PhysicalConnectionId	String	Yes	pc-bp1hp0wr072f6ambni141	The instance ID of the physical connection interface.
RegionId	String	Yes	cn-hangzhou	The ID of the region where the leased line is deployed.
AutoPay	Boolean	No	true	Optional. Indicates whether to pay automatically. Valid values: · true (default value): Pay automatically. If you select this value, you must ensure that your account has enough available funds. Otherwise, the order that is generated is invalid. · false: Generates the order only. No fee is deducted from your account.
ClientToken	String	No	CBCE910E-D396-4944-8764-B4047838B2D1	Optional. The token used for client authentication.

Parameter	Type	Required?	Example value	Description
InstanceChargeType	String	No	PostPaid	Optional. The billing method of the instance. Valid values: - PrePaid: Subscription. If you select this value, you must make sure that your account has enough available funds. - PostPaid (default value): Pay-As-You-Go
Period	Integer	No	1	Optional. The validity period of a Subscription.
PricingCycle	String	No	Month	Optional. The Subscription cycle. Valid values: - Month - Year

Response parameters

Parameter	Type	Example value	Description
RequestId	String	CBCE910E-D396-4944-8764-B4047838B2D1	The ID of the request.

Example

Request example

```
http ( s )://[ Endpoint ]/? PhysicalConnectionId = pc - bp1hp0wr07
2f6ambni14 1
& RegionId = cn - hangzhou
&< CommonParameters >
```

Response example

XML format

```
< CreatePhysicalConnectionOccupancyOrder >
  < code > 200 </ code >
  < data >
    < orderId > 2031673097 40138 </ orderId >
```

```
</ data >
< httpStatus Code > 200 </ httpStatus Code >
< message > successful </ message >
< requestId > CBCE910E - D396 - 4944 - 8764 - B4047838B2 D1 </
requestId >
< success > true </ success >
</ CreatePhysicalConnectionOccupancyOrder >
```

JSON format

```
{
  "message ":" successful ",
  "httpStatus Code ": 200 ,
  "requestId ":" CBCE910E - D396 - 4944 - 8764 - B4047838B2 D1 ",
  "data ":{
    "orderId ": 2031673097 40138
  },
  "code ":" 200 ",
  "success ": true
}
```

Error codes

HttpCode	Error code	Error message	Description
404	InvalidPhysicalConnectionId.NotFound	The PhysicalConnectionId provided does not exist in our records.	The ID of the physical connection does not exist.
400	Forbidden.NotAllowedInState	The request does not allow in this state.	Your request cannot be executed because the status of the physical connection does not permit this action.

[Click here to view the error codes.](#)

18.11 CreatePhysicalConnectionSetupOrder

Create an order for the resource fee.

Debug

Perform a [debug](#) in OpenAPI Explorer. We recommend that you use OpenAPI Explorer. By using OpenAPI Explorer, you can call APIs, generate SDK code examples automatically, and search APIs, allowing you to quickly and easily get started with using APIs on the cloud.

Request parameters

Parameter	Type	Required?	Example value	Description
AccessPointId	String	Yes	ap-cn-beijing-ft-A	The ID of the access point.
Action	String	Yes	CreatePhysicalConnectionSetupOrder	The action to perform. Valid value: CreatePhysicalConnectionSetupOrder.
LineOperator	String	Yes	CT	The service provider that provides the leased line. Valid values: - CT: China Telecom - CU: China Unicom - CM: China Mobile - CO: Other Chinese service providers - Equinix: Equinix - Other: Other service providers outside Mainland China
RegionId	String	Yes	cn-shanghai	The ID of the region where the leased line is deployed. You can get the region ID by calling the DescribeRegions API.
AutoPay	Boolean	No	true	Optional. Indicates whether to pay the fee automatically. Valid values: true false.
ClientToken	String	No	318BB676-0A2B-43A0-9AD8-F1D34E93750F	Optional. The token used for client authentication.

Parameter	Type	Required?	Example value	Description
PortType	String	No	100Base-T	Optional. The type of the leased line connection port. Valid values: 100Base-T: 100M electrical ports 1000Base-T (default value): Gigabit electrical ports 1000Base-LX: 1000M single-mode optical ports (10 km) 10GBase-T: 10GE electrical ports 10GBase-LR: 10GE single-mode optical ports (10km)
RedundantPhysicalConnectionId	String	No	pc-bp10zsv5ntpxxxxxxxxxx	Optional. The ID of the redundant physical connection. Its status must be Allocated, Confirmed, or Enabled.
Type	String	No	VPC	Optional. The type of the physical connection.

Response parameters

Parameter	Type	Example value	Description
OrderId	String	202844382740728	The ID of the order.

Example

Request example

```
http ( s ) : [ Endpoint ] / ? AccessPointId = ap - cn - beijing - ft - A
& LineOperator = CT
& RegionId = cn - shanghai
```

```
&< CommonParameters >
```

Response example

XML format

```
< CreatePhysicalConnectionSetupOrder >
  < code > 200 </ code >
  < data >
    < orderId > 2032554009 60138 </ orderId >
  </ data >
  < httpStatusCode > 200 </ httpStatusCode >
  < message > successful </ message >
  < requestId > AA874147 - 4A58 - 41D4 - 95E2 - F2FFDAF417 A6 </
requestId >
  < success > true </ success >
</ CreatePhysicalConnectionSetupOrder >
```

JSON format

```
{
  "message": "successful",
  "httpStatusCode": 200,
  "requestId": "AA874147 - 4A58 - 41D4 - 95E2 - F2FFDAF417 A6",
  "data": {
    "orderId": "2032554009 60138"
  },
  "code": "200",
  "success": true
}
```

Error codes

[Click here to view the error codes.](#)

18.12 DescribePhysicalConnectionLOA

Query LOA information about the physical connection.

Debug

Perform a [debug](#) in OpenAPI Explorer. We recommend that you use OpenAPI Explorer. By using OpenAPI Explorer, you can call APIs, generate SDK code examples automatically, and search APIs, allowing you to quickly and easily get started with using APIs on the cloud.

Request parameters

Parameter	Type	Required?	Example value	Description
InstanceId	String	Yes	pc-bp1ca4wca27xxxxxxxxx	The instance ID of the physical connection interface.
RegionId	String	Yes	cn-hangzhou	The ID of the region where the leased line is deployed.
ClientToken	String	No	318BB676-0A2B-43A0-9AD8-F1D34E93750F	Optional. The token used for client authentication.

Response parameters

Parameter	Type	Example value	Description
PhysicalConnectionLOAType			The LOA information of the physical connection.
└ CompanyLocalizedName	String	company	The company name that you set when you registered your account.
└ CompanyName	String	test1234	The name of the company that requires the leased line.
└ ConstructionTime	String	2019-02-26T08:00:00Z	The time when the the data center cable installation technician or representative will go to the installation site.
└ InstanceId	String	pc-bp1ca4wca27xxxxxxxxx	The instance ID of the physical connection interface.
└ LineCode	String	aaa111	The number of leased line.
└ LineLabel	String	bbb222	The label numbers of the cables at the installation site.

Parameter	Type	Example value	Description
LineType	String	MSTP	The type of the physical connection. Valid values: • MSTP • Other • SDH • MPLSVPN • FIBRE
LoaUrl	String	http://pconn-loa.oss-cn-shenzhen.aliyuncs.com/1993847644011928_pc-bp1ca4wca27ertsucaxn0_cn-hangzhou-dg-a01.pdf?Expires=1551164196&OSSAccessKeyId=dCrRKgLiFLHAAo6k&Signature=d/w0BARgZ5uJHXODnjpr1oKIEC4%3D	The URL to use to download the LOA file.
PMInfo			The information about the data center cable installation technician or representative.
PMCertificateNo	String	12345671223	The certificate or licence number of the data center cable installation technician or representative.
PMCertificateType	String	Other	The type of certificate or licence held by the data center cable installation technician or representative.

Parameter	Type	Example value	Description
PMContactInfo	String	18910010000	The contact information of the data center cable installation technician or representative.
PMGender	String	Male	The gender of the data center cable installation technician or representative.
PMName	String	name	The name of the data center cable installation technician or representative.
SI	String	ctcu	The name of the data center cable installation company.
Status	String	Available	The status of the physical connection interface.
RequestId	String	318BB676-0A2B-43A0-9AD8-F1D34E93750F	The ID of the request.

Example

Request example

```
http ( s )://[ Endpoint ]/? InstanceId = pc - bp1ca4wca2 7exxxxxxxx
& RegionId = cn - hangzhou
&< CommonParameters >
```

Response examples

XML format

```
< DescribePhysicalConnectionLOA >
  < code > 200 </ code >
  < data >
    < companyName > test1234 </ companyName >
    < constructionTime > 2019 - 02 - 26T08 : 00 : 00Z </ constructionTime >
    < instanceId > pc - bp1ca4wca2 7ertsucaxn 0 </ instanceId >
    < lineType > MSTP </ lineType >
    < loaUrl > http :// pconn - loa . oss - cn - shenzhen . aliyuncs . com / 1993847644 011928_pc - bp1ca4wca2 7ertsucaxn 0_cn - hangzhou
```

```

- dg - a01 . pdf ? Expires = 1551164196 & amp ; OSSAccessK eyId =
dCrRKgLiFL LHAo6k & amp ; Signature = d / w0BARgZ5uJ HX0Dnjpr1o
KIEC4 % 3D </ loaUrl >
  < pmInfo >
    < nextPMInde x > 1 </ nextPMInde x >
    < pmCertific ateNo > 1234567 </ pmCertific ateNo >
    < pmCertific ateType > Other </ pmCertific ateType >
    < pmContactI nfo > 1891001000 0 </ pmContactI nfo >
    < pmGender > Male </ pmGender >
    < pmName > test </ pmName >
  </ pmInfo >
  < si > ctcu </ si >
  < status > Available </ status >
</ data >
< message > successful </ message >
< requestId > 318BB676 - 0A2B - 43A0 - 9AD8 - F1D34E9375 0F </
requestId >
< success > true </ success >
</ DescribePh ysicalConn ectionLOA >

```

JSON format

```

{
  " message ":" successful ",
  " requestId ":" 318BB676 - 0A2B - 43A0 - 9AD8 - F1D34E9375 0F ",
  " data ":{
    " lineType ":" MSTP ",
    " status ":" Available ",
    " pmInfo ":[
      {
        " pmContactI nfo ":" 1891001000 0 ",
        " pmGender ":" Male ",
        " pmCertific ateNo ":" 1234567 ",
        " pmCertific ateType ":" Other ",
        " nextPMInde x ": 1 ,
        " pmName ":" test "
      }
    ],
    " instanceId ":" pc - bp1ca4wca2 7ertsucaxn 0 ",
    " constructi onTime ":" 2019 - 02 - 26T08 : 00 : 00Z ",
    " companyNam e ":" test1234 ",
    " si ":" ctcu ",
    " loaUrl ":" http :// pconn - loa . oss - cn - shenzhen . aliyuncs
. com / 1993847644 011928_pc - bp1ca4wca2 7ertsucaxn 0_cn -
hangzhou - dg - a01 . pdf ? Expires = 1551164196 & OSSAccessK eyId =
dCrRKgLiFL LHAo6k & Signature = d / w0BARgZ5uJ HX0Dnjpr1o KIEC4 %
3D "
  },
  " code ":" 200 ",
  " success ": true
}

```

Error codes

[Click here to view the error codes.](#)

19 Border Gateway Protocol (BGP)

19.1 DescribeBgpNetworks

Query the advertised BGP networks.

Request parameters

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: DescribeBgpNetworks
RegionId	String	Yes	The region of the BGP network. You can obtain the region ID by calling the DescribeRegions API.
dstCidrBlock	String	No	The advertised BGP network.
routeId	String	No	The ID of the VBR.

Response parameters

Name	Type	Description
RequestId	String	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DescribeBgpNetworks
&RegionId=cn-beijing
&CommonParameters
```

Response example

• XML format

```
<?xml version="1.0" encoding="UTF-8"?>
  <DescribeBgpNetworksResponse>
    <BgpNetworks>
      <BgpNetwork>
```

```

    < DstCidrBlock > 10 . 1 . 1 . 0 / 24 </
DstCidrBlock >
    < VpcId ></ VpcId >
  </ BgpNetwork >
</ BgpNetworks >
  < RequestId > 6F513A15 - 669F - 419D - B511
- 08A8529205 9B </ RequestId >
  < PageSize > 10 </ PageSize >
  < TotalCount > 1 </ TotalCount >
</ DescribeBgpNetworksResponse >

```

- JSON format

```

{
  "BgpNetworks": {
    "BgpNetwork": [
      {
        "DstCidrBlock": "10 . 1 . 1 . 0 / 24 ",
        "VpcId": ""
      }
    ]
  },
  "RequestId": "6F513A15 - 669F - 419D - B511 - 08A8529205 9B ",
  "PageSize": 10,
  "TotalCount": 1
}

```

19.2 CreateBgpGroup

Creates a BGP group.

You can use BGP to establish the communication between the Virtual Border Router (VBR) and the on-premises IDC. To use BGP, add the BGP peer communicating with the VBR to the corresponding BGP group and advertise the BGP network in the VBR.

A BGP group is used for simplifying BGP configurations. You can combine repetitive configurations into a BGP group to reduce the configuration complexity. Each BGP group is associated with an autonomous system number (ASN).

Note the following before you call this action:

- The supported BGP version is 4 (BGP4).
- IPv4 BGP is supported, but IPv6 BGP is not supported.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreateBgpGroup	The name of this action. Value: CreateBgpGroup
PeerASN	String	Yes	1111	The ASN of the BGP peer.
RegionId	String	Yes	cn-shanghai	The region to which the BGP group belongs. To query the region ID, call DescribeRegions.
RouterId	String	No	vrt-bp1lhl0taikrteen80oxx	The ID of the VBR.
Authkey	String	No	!PWZ2wsq	The authentication key of the BGP group.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	The client token that guarantees the idempotence of the request. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.
Description	String	No	BGP	The description of the BGP group. The description must be 2 to 256 characters in length. It must start with a letter, but cannot start with <code>http://</code> or <code>https://</code> .

Parameter	Type	Required ?	Example value	Description
IsFakeAsn	Boolean	No	true	Indicates whether the ASN is the correct ASN. A router running BGP can only belong to one AS in general . However, in such cases as where an AS needs to be migrated or merged with other ASs, a new ASN must be used.
Name	String	No	test	The name of the BGP group. 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. It cannot start with <code>http ://</code> or <code>https ://</code>.

Response parameters

Parameter	Type	Example value	Description
BgpGroupId	String	bgpg-2zendnzngq9lkjkhvlsr	The ID of the BGP group.
RequestId	String	C1221A1F-2ACD-4592-8F27-474E02883159	The ID of the request.

Examples

Request example

```
https :// vpc . aliyuncs . com /? Action = CreateBgpG roup
& PeerAsn = 1111
& RegionId = cn - shanghai
```

```
& RouterId = vrt - bp1lhl0tai krteen80ox x
&< CommonParameters >
```

Response example

• XML format

```
< CreateBgpGroupResponse >
  < BgpGroupId > bgpg - 2zendnzngq 9lkjkhvls r </ BgpGroupId >
  < RequestId > C1221A1F - 2ACD - 4592 - 8F27 - 474E028831 59 </
  RequestId >
</ CreateBgpGroupResponse >
```

• JSON format

```
{
  " BgpGroupId ":" bgpg - 2zendnzngq 9lkjkhvls r ",
  " RequestId ":" C1221A1F - 2ACD - 4592 - 8F27 - 474E028831 59 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	QuotaExceeded.Bgp	bgp peer count per vbr quota exceed.	The BGP group quota of the VBR has been reached.
400	QuotaExceeded.Nqa	nqa count per vbr quota exceed.	The NQA quota of the VBR has been reached.
400	QuotaExceeded.BgpNetwork	bgp network count per vbr quota exceed.	The BGP network quota of the VBR has been reached.
400	InvalidPeerIpAddress	multi pconn peer ip can not be null.	The peer IP address of multiple physical connections cannot be null.
400	InvalidVbrNetwork	vbr network not exists	The specified VBR does not exist.
400	InvalidBgpName.Malformed	Specified Bgp Group name is not valid.	The name of the BGP group is invalid.
400	InvalidBgpDescription.Malformed	Specified Bgp Group description is not valid.	The description of the BGP group is invalid.
400	InvalidBgpAuthkey.Malformed	Specified Bgp Group authkey is not valid.	The authentication key of the BGP group is invalid.

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	The specified RegionId is not found.	The specified region ID does not exist.
400	InvalidIP.Malformed	Ip malformed.	The IP address format is invalid.
400	InvalidPeerAsn.Malformed	invalid peer asn cannot equals aliyun asn:45104	The specified ASN cannot be the same as the Alibaba Cloud ASN.
400	InvalidParams.NotNull	invalid peer asn cannot equals aliyun asn:45104	The specified ASN cannot be the same as the Alibaba Cloud ASN.
400	InvalidParams.NotFound	vpc instance not found	The specified VPC does not exist.
400	InvalidParams.AlreadyExists	bgp network already exists	The specified BGP network already exists.
400	InvalidStatus.CannotOperate	invalid status cannot operate	You cannot perform this operation because the status of the resource does not permit this action.

[See common error codes](#)

19.3 DescribeBgpGroups

Queries BGP groups.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeBgpGroupsDescribeBgpGroups	The name of this action. Value: DescribeBgpGroups
RegionId	String	Yes	cn-shanghai	The region to which the BGP group belongs. To query the region ID, call DescribeRegions.
BgpGroupId	String	No	bgpg-wz9f62v4fbg2gxxxxxxxxx	The ID of the BGP group.
IsDefault	Boolean	No	false	Indicates whether the specified BGP group is the default BGP group.
OwnerAccount	String	No	1234abcd@aliyun.com	The owner account.
PageNumber	Integer	No	1	The number of pages to return. Default value: 1 .
PageSize	Integer	No	1	The number of rows per page. Maximum value: 50 . Default value: 10 .
RouterId	String	No	vrt-kojok19x3j0q6kx	The ID of the VBR associated with the BGP group.

Response parameters

Parameter	Type	Example value	Description
TotalCount	Integer	10	The number of queried entries.

Parameter	Type	Example value	Description
PageNumber	Integer	1	The current page number.
PageSize	Integer	5	The number of entries per page.
BgpGroups			A list of BGP groups.
└AuthKey	String	!PWZ2wsq	The authentication key used by the BGP group.
└BgpGroupId	String	bgp-wz977wcrmb69axxxxxxxxx	The ID of the BGP group.
└Description	String	The	The description of the BGP group.
└Hold	String	30	The hold time to wait for the BGP message. If no BGP message is received when the hold time is reached, the BGP peer is disconnected.
└IsFake	String	true	Indicates whether the ASN is fake.
└Keepalive	String	10	The keep-alive time.
└LocalAsn	String	45104	The local ASN.
└Name	String	BGPName	The name of the BGP group.
└PeerAsn	String	1111	The ASN of the BGP peer.
└RegionId	String	cn-shanghai	The region ID of the BGP group. For more information, see Regions and zones .
└RouteLimit	String	99	The route quota.
└RouterId	String	vrt-bp1lhl0tai krteen80oxx	The ID of the VBR.

Parameter	Type	Example value	Description
└─Status	String	active	The status of the BGP peer.
RequestId	String	1D0971B2-A35A-42C1-A44C-E91360C36C0B	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DescribeBgpGroups
&RegionId=cn-shanghai
&<CommonParameters>
```

Response example

• XML format

```
<DescribeBgpGroupsResponse>
  <TotalCount>1</TotalCount>
  <PageSize>10</PageSize>
  <RequestId>09E2C0FD-37FF-4737-80DF-517AC36D43DB</RequestId>
  <BgpGroups>
    <BgpGroup>
      <BgpGroupId>bpgp-2zev8h2wo4-14sfhjgdlh</BgpGroupId>
      <LocalAsn>45104</LocalAsn>
      <Hold>30</Hold>
      <Description />
      <AuthKey />
      <IsFake>true</IsFake>
      <PeerAsn>234</PeerAsn>
      <Keepalive>10</Keepalive>
      <RouteLimit>99</RouteLimit>
      <Name>Group1</Name>
      <Status>Pending</Status>
      <RouterId>vbr-2zecmmvg5g-vu8i4telkh</RouterId>
      <RegionId>cn-beijing</RegionId>
    </BgpGroup>
  </BgpGroups>
</DescribeBgpGroupsResponse>
```

• JSON format

```
{
  "TotalCount": 1,
  "PageSize": 10,
  "RequestId": "09E2C0FD-37FF-4737-80DF-517AC36D43DB",
  "BgpGroups": {
    "BgpGroup": [
      {
        "BgpGroupId": "bpgp-2zev8h2wo4-14sfhjgdlh",
        "LocalAsn": 45104,
```

```
" Hold ": 30 ,
" Descriptio n ":"",
" AuthKey ":"",
" IsFake ": true ,
" PeerAsn ": 234 ,
" Keepalive ": 10 ,
" RouteLimit ": 99 ,
" Name ":" Group1 ",
" Status ":" Pending ",
" RouterId ":" vbr - 2zecmmvg5g vu8i4telkh w ",
" RegionId ":" cn - beijing "
}
]
}
}
```

Error codes

HTTP status code	Error code	Error message	Description
500	InternalServerError	The request processing has failed due to some unknown error.	An error occurred while the request was being processed.
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.

[See common error codes](#)

19.4 ModifyBgpGroupAttribute

Modifies the configurations of a BGP group.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required ?	Example value	Description
Action	String	Yes	ModifyBgpGroupAttribute	The name of this action. Value: ModifyBgpGroupAttribute

Parameter	Type	Required?	Example value	Description
BgpGroupId	String	Yes	bgpg-wz9f62v4fbg2gxxxxxxxxx	The ID of the BGP group.
RegionId	String	Yes	cn-shanghai	The region to which the BGP group belongs. To query the region ID, call DescribeRegions.
AuthKey	String	No	!PWZ2wsq	The authentication key of the BGP group.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	A client token used to guarantee the idempotence of requests. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.
Description	String	No	BGP	The description of the BGP group. The description must be 2 to 256 characters in length. It must start with a letter, but cannot start with <code>http://</code> or <code>https://</code> .

Parameter	Type	Required?	Example value	Description
IsFakeAsn	Boolean	No	true	Indicates whether the ASN is the correct ASN. A router running BGP can only belong to one AS in general . However, in such cases as where an AS needs to be migrated or merged with other ASs, a new ASN must be used.
Name	String	No	test	The name of the BGP group. 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. It cannot start with <code>http://</code> or <code>https://</code> .
PeerASN	String	No	1111	The ASN of the BGP peer.

Request parameters

Parameter	Type	Example value	Description
RequestId	String	8C3C6D7C-A1CE-4FD8-BC57-DC493A55F76F	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=ModifyBgpGroupAttribute
&BgpGroupId=bgpg-wz9f62v4fb-g2gxxxxxxx
&RegionId=cn-shanghai
```

&< CommonParameters >

Response example

- XML format

```
< ModifyBgpGroupAttributeResponse >
  < RequestId > C1221A1F - 2ACD - 4592 - 8F27 - 474E028831 59 </
  RequestId >
</ ModifyBgpGroupAttributeResponse >
```

- JSON format

```
"RequestId": "C1221A1F - 2ACD - 4592 - 8F27 - 474E028831 59"
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	Specified value of "regionId" is not supported.	The specified region ID does not exist.
400	QuotaExceeded.Bgp	bgp peer count per vbr quota exceed.	The BGP group quota of the VBR has been reached.
400	QuotaExceeded.Nqa	nqa count per vbr quota exceed.	The NQA quota of the VBR has been reached.
400	QuotaExceeded.BgpNetwork	bgp network count per vbr quota exceed.	The BGP network quota of the VBR has been reached.
400	InvalidPeerIpAddress	multiple peer IP addresses cannot be null.	The peer IP address of multiple physical connections cannot be null.
400	InvalidVbrNetwork	vbr network does not exist.	The specified VBR does not exist.
400	InvalidBgpGroup	bgp group does not exist.	The specified BGP group does not exist.
400	InvalidBgpName.Malformed	Specified BGP group name is not valid.	The name of the BGP group is invalid.
400	InvalidBgpDescription.Malformed	Specified BGP group description is not valid.	The description of the BGP group is invalid.

HTTP status code	Error code	Error message	Description
400	InvalidBgpAuthkey.Malformed	Specified Bgp Group authkey is not valid.	The authentication key of the BGP group is invalid.
400	InvalidIP.Malformed	Ip malformed.	The IP address format is invalid.
400	InvalidPeerAsn.Malformed	invalid peer asn cannot equals aliyun asn:45104	The specified ASN cannot be the same as the Alibaba Cloud ASN.
400	InvalidParams.NotNull	invalid peer asn cannot equals aliyun asn:45104	The specified ASN cannot be the same as the Alibaba Cloud ASN.
400	InvalidParams.NotFound	vpc instance not found	The specified VPC does not exist.
400	InvalidParams.AlreadyExists	bgp network already exists	The specified BGP network already exists.
400	InvalidStatus.CannotOperate	invalid status cannot operate	The status of the resource does not permit this action.

[See common error codes](#)

19.5 DeleteBgpGroup

Deletes a BGP group.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteBgpGroup	The name of this action. Value: DeleteBgpGroup

Parameter	Type	Required?	Example value	Description
BgpGroupId	String	Yes	bgpg-wz9f62v4fbg2gxxxxxxxxx	The ID of the BGP group.
RegionId	String	Yes	cn-shanghai	The region to which the BGP group belongs. To query the region ID, call DescribeRegions.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	The client token that guarantees the idempotence of the request. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	97E2E97F-968C-48AF-A310-AC4D068854DB	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DeleteBgpGroup
&BgpGroupId=bgpg-wz9f62v4fbg2gxxxxxxxxx
&RegionId=cn-shanghai
&<CommonParameters>
```

Response example

- XML format

```
<DeleteBgpGroupResponse>
  <RequestId>0ED8D006-F706-4D23-88ED-E11ED28DCA C0</
  RequestId>
```

```
</ DeleteBgpGroupResponse >
```

- JSON format

```
{
  "RequestId ":" 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	Specified value of "regionId" is not supported.	The specified region ID does not exist.
400	QuotaExceeded.Bgp	bgp peer count per vbr quota exceed.	The BGP group quota of the VBR has been reached.
400	QuotaExceeded.Nqa	nqa count per vbr quota exceed.	The BGP group quota of the VBR has been reached.
400	QuotaExceeded.BgpNetwork	bgp network count per vbr quota exceed.	The BGP network quota of the VBR has been reached.
400	InvalidPeerIpAddress	multi pconn peer ip can not be null.	The peer IP address of multiple physical connections cannot be null.
400	InvalidVbrNetwork	vbr network not exists	The specified VBR does not exist.
400	InvalidBgpGroup	bgp group not exists	The specified BGP group does not exist.
400	InvalidBgpName.Malformed	Specified Bgp Group name is not valid.	The name of the BGP group is invalid.
400	InvalidBgpDescription.Malformed	Specified Bgp Group description is not valid.	The description of the BGP group is invalid.
400	InvalidBgpAuthkey.Malformed	Specified Bgp Group authkey is not valid.	The authentication key of the BGP group is invalid.
400	InvalidIP.Malformed	Ip malformed.	The IP address format is invalid.

HTTP status code	Error code	Error message	Description
400	InvalidPeerAsn.Malformed	invalid peer asn cannot equals aliyun asn:45104	The specified ASN cannot be the same as the Alibaba Cloud ASN.
400	InvalidParams.NotNull	invalid peer asn cannot equals aliyun asn:45104	The specified ASN cannot be the same as the Alibaba Cloud ASN.
400	InvalidParams.NotFound	vpc instance not found	The specified VPC does not exist.
400	InvalidParams.AlreadyExists	bgp network already exists	The specified BGP network already exists.
400	InvalidStatus.CannotOperate	invalid status cannot operate	The status of the resource does not permit this action.

[See common error codes](#)

19.6 CreateBgpPeer

Adds a BGP peer to a BGP group.

Debug

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

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreateBgpPeer	The name of this action. Value: CreateBgpPeer
BgpGroupId	String	Yes	bgpg-wz9f62v4fbgxxxxxxxx	The ID of the BGP group to which you want to add a BGP peer.

Parameter	Type	Required?	Example value	Description
RegionId	String	Yes	cn-shanghai	The region ID of the BGP group. To query the region ID, call DescribeRegions .
ClientToken	String	No	02fb3da4-130e-11e9-8e44-001xxxxxxxxx	Optional. Guarantees the idempotence of the request. The value of this parameter is generated by the client. The value is unique among all requests and can contain a maximum of 64 ASCII characters.
EnableBfd	Boolean	No	true	Optional. Indicates whether to enable the BFD function. Valid values: · true: Enable the BFD function. · false: Do not enable the BFD function.
PeerIpAddress	String	No	116.62.xx.xx	Optional. The IP address of the BGP peer to be added.

Response parameters

Parameter	Type	Example value	Description
BgpPeerId	String	Bgp-awjhxxxxxx	The ID of the BGP peer.
RequestId	String	D4B7649A-61BB-4C64-A586-1DFF1EDA6A42	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=CreateBgpPeer
&BgpGroupId=bgpg-wz9f62v4fb-gxxxxxxx
&RegionId=cn-shanghai
&<CommonParameters>
```

Response examples

XML format

```
<CreateBgpPeerResponse>
  <RequestId>0ED8D006-F706-4D23-88ED-E11ED28DCA-C0</
  RequestId>
</CreateBgpPeerResponse>
```

JSON format

```
{
  "RequestId": "0ED8D006-F706-4D23-88ED-E11ED28DCA-C0"
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	Specified value of "regionId" is not supported.	The specified region ID is invalid. Please check if the cloud service is available in the specified region.
400	QuotaExceeded.Bgp	bgp peer count per vbr quota exceed.	The number of BGP groups in the VBR has reached the quota.
400	QuotaExceeded.Bgp	bgp group count per vbr quota exceed.	The number of BGP groups in the VBR has reached the quota.
400	QuotaExceeded.Nqa	nqa count per vbr quota exceed.	The number of NQA instances has reached the quota.
400	QuotaExceeded.BgpNetwork	bgp network count per vbr quota exceed.	The number of BGP networks of the VBR has reached the quota.

HTTP status code	Error code	Error message	Description
400	InvalidPeerIpAddress	multi pconn peer ip can not be null.	The peer IP address cannot be left blank in the case of multiple physical connections.
400	InvalidVbrNetwork	vbr netowrk not exists	The specified VBR does not exist.
400	InvalidBgpGroup	bgp group not exists	The specified BGP group does not exist.
400	InvalidBgpName.Malformed	Specified Bgp Group name is not valid.	The name of the BGP group is invalid.
400	InvalidBgpDiscription.Malformed	Specified Bgp Group description is not valid.	The description of the BGP group is invalid.
400	InvalidBgpAuthkey.Malformed	Specified Bgp Group authkey is not valid.	The authentication key of the BGP group is invalid.
400	InvalidIP.Malformed	Ip malformed.	The IP address format is invalid.
400	InvalidPeerAsn.Malformed	invalid peer asn cannot equals aliyun asn:45104	The specified ASN cannot be the same as the Alibaba Cloud ASN.
400	InvalidParams.NotNull	invalid peer asn cannot equals aliyun asn:45104	The specified ASN cannot be the same as the Alibaba Cloud ASN.
400	InvalidParams.NotFound	instance not found	The specified instance does not exist.
400	InvalidParams.NotFound	vpc instance not found	The specified VPC does not exist.
400	InvalidParams.AlreadyExists	bgp network already exists	The specified BGP network already exists.
400	InvalidStatus.CannotOperate	invalid status cannot operate	The status of the resource does not permit this operation.

[See common error codes.](#)

19.7 DescribeBgpPeers

Queries BGP peers in a region.

Debug

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

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DescribeBgpPeers	The name of this action. Value: DescribeBgpPeers
RegionId	String	Yes	cn-shanghai	The ID of the region to which the BGP group belongs. To query the region ID, call DescribeRegions .
BgpGroupId	String	No	bgpg-2zev8h2wo414xxxxxxx	Optional. The ID of the BGP group.
BgpPeerId	String	No	bgp-2ze3un0ft1jd1xxxxxxx	Optional. The ID of the BGP peer.
IsDefault	Boolean	No	false	Optional. Indicates whether the BGP group is the default BGP group.
OwnerAccount	String	No	xxx@aliyun.com	Optional. Your account.
PageNumber	Integer	No	1	Optional. The page number of the BGP peer list. Default value : 1

Parameter	Type	Required ?	Example value	Description
PageSize	Integer	No	1	Optional. The number of rows per page for a paged query. Maximum value: 50. Default value: 10
RouterId	String	No	vrt-acfmxazxxx xxxxx	Optional. The ID of the VRouter.

Response parameters

Parameter	Type	Example value	Description
BgpPeers			A list of BGP peers.
└Name	String	test	The name of the BGP peer.
└PeerIpAddress	String	116.62.xx.xx	The IP address of the BGP peer.
└AuthKey	String	!PWZ2wsq	The authentication key of the BGP group.
└RouterId	String	vbr-2zecmmvg5g vu8xxxxxxxxx	The ID of the VRouter.
└Status	String	active	The status of the BGP peer.
└BgpGroupId	String	bgp-wz977wcrmb 69xxxxxxxxx	The ID of the BGP group.
└BgpPeerId	String	bgp-wz977wcrmb 69xxxxxxxxx	The ID of the BGP peer.
└BgpStatus	String	Established	The BGP connection status.
└Description	String	xxxxxxxxx	The description of the BGP group.

Parameter	Type	Example value	Description
└EnableBfd	Boolean	true	Indicates whether to enable the BFD function. Valid values: · true: Enable the BFD function. · false: Do not enable the BFD function.
└Hold	String	30	The hold time.
└IsFake	String	true	Indicates whether a fake ASN is enabled.
└Keepalive	String	10	The keep-alive time.
└LocalAsn	String	45104	The local ASN.
└PeerAsn	String	active	The ASN of the BGP peer.
└RegionId	String	cn-shanghai	The ID of the region to which the BGP group belongs.
└RouteLimit	String	99	The route quota.
TotalCount	Integer	10	The number of queried entries.
PageNumber	Integer	1	The current page number.
PageSize	Integer	2	The number of entries per page.
RequestId	String	DE77A7F3-3B74-41C0-A5BC-CAFD188C28B6	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DescribeBgpPeers
&RegionId=cn-shanghai
&<CommonParameters>
```

Response examples

XML format

```

< DescribeBg  pPeers >
  < TotalCount > 2 </ TotalCount >
  < PageSize > 10 </ PageSize >
  < RequestId > 16DFA5E6 - 9771 - 41B7 - B079 - DD7C2DF49B  E6 </
RequestId >
  < BgpPeers >
    < BgpPeer >
      < BgpGroupId > bgpg - 2zev8h2wo4 14sxxxxxxxx x </ BgpGroupId >
      < LocalAsn > 45104 </ LocalAsn >
      < PeerIpAddr  ess > 11 . 11 . xx . xx </ PeerIpAddr  ess >
      < Hold > 30 </ Hold >
      < Descriptio  n />
      < AuthKey />
      < IsFake > true </ IsFake >
      < PeerAsn > 234 </ PeerAsn >
      < Keepalive > 10 </ Keepalive >
      < RouteLimit > 99 </ RouteLimit >
      < BgpPeerId > bgp - 2ze3un0ft1 jd1xxxxxxxx x </ BgpPeerId >
      < Name />
      < Status > Available </ Status >
      < BgpStatus />
      < RouterId > vbr - 2zecmmvg5g vu8xxxxxxxx x </ RouterId >
      < RegionId > cn - beijing </ RegionId >
    </ BgpPeer >
    < BgpPeer >
      < BgpGroupId > bgpg - 2zev8h2wo4 14sxxxxxxxx x </ BgpGroupId >
      < LocalAsn > 45104 </ LocalAsn >
      < PeerIpAddr  ess > 11 . 11 . xx . xx </ PeerIpAddr  ess >
      < Hold > 30 </ Hold >
      < Descriptio  n />
      < AuthKey />
      < IsFake > true </ IsFake >
      < PeerAsn > 234 </ PeerAsn >
      < Keepalive > 10 </ Keepalive >
      < RouteLimit > 99 </ RouteLimit >
      < BgpPeerId > bgp - 2zeu54rbre qqzxxxxxxxx x </ BgpPeerId >
      < Name />
      < Status > Available </ Status >
      < BgpStatus />
      < RouterId > vbr - 2zecmmvg5g vu8xxxxxxxx x </ RouterId >
      < RegionId > cn - beijing </ RegionId >
    </ BgpPeer >
  </ BgpPeers >
</ DescribeBg  pPeers >

```

JSON format

```

{
  " TotalCount ": 2 ,
  " PageSize ": 10 ,
  " RequestId ":" 16DFA5E6 - 9771 - 41B7 - B079 - DD7C2DF49B  E6 ",
  " BgpPeers ":{
    " BgpPeer ":[
      {
        " BgpGroupId ":" bgpg - 2zev8h2wo4 14sxxxxxxxx x ",
        " LocalAsn ": 45104 ,
        " PeerIpAddr  ess ":" 11 . 11 . xx . xx ",
        " Hold ": 30 ,
        " Descriptio  n ":"",
        " AuthKey ":"",

```

```

    " IsFake ": true ,
    " PeerAsn ": 234 ,
    " Keepalive ": 10 ,
    " RouteLimit ": 99 ,
    " BgpPeerId ":" bgp - 2ze3un0ft1  jd1xxxxxxx  x ",
    " Name ":"",
    " Status ":" Available ",
    " BgpStatus ":"",
    " RouterId ":" vbr - 2zecmmvg5g  vu8xxxxxxx  x ",
    " RegionId ":" cn - beijing "
  },
  {
    " BgpGroupId ":" bgpg - 2zev8h2wo4  14sxxxxxxx  x ",
    " LocalAsn ": 45104 ,
    " PeerIpAddress ":" 11 . 11 . xx . xx ",
    " Hold ": 30 ,
    " Description ":"",
    " AuthKey ":"",
    " IsFake ": true ,
    " PeerAsn ": 234 ,
    " Keepalive ": 10 ,
    " RouteLimit ": 99 ,
    " BgpPeerId ":" bgp - 2zeu54rbre  qqzxxxxxxx  x ",
    " Name ":"",
    " Status ":" Available ",
    " BgpStatus ":"",
    " RouterId ":" vbr - 2zecmmvg5g  vu8xxxxxxx  x ",
    " RegionId ":" cn - beijing "
  }
]
}
}

```

Error codes

HTTP status code	Error code	Error message	Description
500	InternalServerError	The request processing has failed due to some unknown error.	The request was not processed due to an unknown error.
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID is invalid. Please check if the cloud service is available in the specified region.

[See common error codes.](#)

19.8 DeleteBgpPeer

Deletes a BGP peer.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteBgpPeer	The name of this action. Value: DeleteBgpPeer
BgpPeerId	String	Yes	bgp-wz977wcrmb69axxxxxxxx	The ID of the BGP peer.
RegionId	String	Yes	cn-shanghai	The region to which the BGP group belongs. To query the region ID, call DescribeRegions.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	The client token that guarantees the idempotence of the request. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	AEBB1EB6-3C15-4A35-B4CE-03485200C143	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DeleteBgpPeer
&BgpPeerId=bgp-wz977wcrmb69axxxxxxx
&RegionId=cn-shanghai
&<CommonParameters>
```

Response example

• XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DeleteBgpPeerResponse>
  <RequestId>0ED8D006-F706-4D23-88ED-E11ED28DCA C0</
  RequestId>
</DeleteBgpPeerResponse>
```

• JSON format

```
{
  "RequestId": "0ED8D006-F706-4D23-88ED-E11ED28DCA C0"
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	Specified value of "regionId" is not supported.	The specified region ID does not exist.
400	QuotaExceeded.Bgp	bgp peer count per vbr quota exceed.	The BGP group quota of the VBR has been reached.
400	QuotaExceeded.Nqa	nqa count per vbr quota exceed.	The NQA quota of the VBR has been reached.
400	QuotaExceeded.BgpNetwork	bgp network count per vbr quota exceed.	The BGP network quota of the VBR has been reached.
400	InvalidPeerIpAddress	multi pconn peer ip can not be null.	The peer IP address of multiple physical connections cannot be null.
400	InvalidVbrNetwork	vbr network not exists	The specified VBR does not exist.

HTTP status code	Error code	Error message	Description
400	InvalidBgpGroup	bgp group not exists	The specified BGP group does not exist.
400	InvalidBgpName.Malformed	Specified Bgp Group name is not valid.	The name of the BGP group is invalid.
400	InvalidBgpDiscription.Malformed	Specified Bgp Group description is not valid.	The description of the BGP group is invalid.
400	InvalidBgpAuthkey.Malformed	Specified Bgp Group authkey is not valid.	The authentication key of the BGP group is invalid.
400	InvalidIP.Malformed	Ip malformed.	The IP address format is invalid.
400	InvalidPeerAsn.Malformed	invalid peer asn cannot equals aliyun asn:45104	The specified ASN cannot be the same as the Alibaba Cloud ASN.
400	InvalidParams.NotNull	invalid peer asn cannot equals aliyun asn:45104	The specified ASN cannot be the same as the Alibaba Cloud ASN.
400	InvalidParams.NotFound	vpc instance not found	The specified VPC does not exist.
400	InvalidParams.AlreadyExists	bgp network already exists	The specified BGP network already exists.
400	InvalidStatus.CannotOperate	invalid status cannot operate	You cannot perform this operation because the status is invalid.

[See common error codes](#)

19.9 AddBgpNetwork

Advertises a BGP network.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	AddBgpNetwork	The name of this action. Value: AddBgpNetwork
DstCidrBlock	String	Yes	10.110.192.12/32	The CIDR block of the VPC or VSwitch to be connected to the on-premises data center.
RegionId	String	Yes	cn-shanghai	The region to which the VBR group belongs. To query the region ID, call DescribeRegions.
RouterId	String	Yes	vrt-2zeo3xzyf38r4urzdpvfs	The ID of the VBR.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	The client token that guarantees the idempotence of the request. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.
VpcId	String	No	vpc-bp1qpo0kug3a20qqe9h7v	The ID of the VPC.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	9C7FA9D6-72E0-48A9-A9C3-2DA8569CD5EB	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=AddBgpNetwork
&DstCidrBlock=10.110.192.12/32
&RegionId=cn-shanghai
&RouterId=vrt-2zeo3xzyf38r4urzdpvf
&<CommonParameters>
```

Response example

• XML format

```
<AddBgpNetworkResponse>
  <RequestId>0ED8D006-F706-4D23-88ED-E11ED28DCA-C0</RequestId>
</AddBgpNetworkResponse>
```

• JSON format

```
{
  "RequestId": "0ED8D006-F706-4D23-88ED-E11ED28DCA-C0"
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	QuotaExceeded.Bgp	bgp peer count per vbr quota exceed.	The BGP group quota of the VBR has been reached.
400	QuotaExceeded.Nqa	nqa count per vbr quota exceed.	The NQA quota of the VBR has been reached.
400	QuotaExceeded.BgpNetwork	bgp network count per vbr quota exceed.	The BGP network quota of the VBR has been reached.
400	InvalidPeerIpAddress	multi pconn peer ip can not be null.	The peer IP address of multiple physical connections cannot be null.
400	InvalidVbrNetwork	vbr network not exists	The specified VBR does not exist.
400	InvalidBgpName.Malformed	Specified Bgp Group name is not valid.	The name of the BGP group is invalid.

HTTP status code	Error code	Error message	Description
400	InvalidBgpDiscription.Malformed	Specified Bgp Group description is not valid.	The description of the BGP group is invalid.
400	InvalidBgpAuthkey.Malformed	Specified Bgp Group authkey is not valid.	The authentication key of the BGP group is invalid.
400	InvalidIP.Malformed	Ip malformed.	The IP address format is invalid.
400	InvalidPeerAsn.Malformed	invalid peer asn cannot equals aliyun asn:45104	The specified ASN cannot be the same as the Alibaba Cloud ASN.
400	InvalidParams.NotNull	parameter must not null.	This parameter cannot be null.
400	InvalidParams.NotFound	vpc instance not found	The specified VPC does not exist.
400	InvalidParams.AlreadyExists	bgp network already exists	The specified BGP network already exists.
400	InvalidStatus.CannotOperate	invalid status cannot operate	The status of the resource does not permit this operation.
404	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The specified region ID does not exist.

[See common error codes](#)

19.10 DeleteBgpNetwork

Deletes an advertised BGP network.

Debug

By using [API Explorer](#), you can easily debug APIs, automatically generate SDK code examples, and quickly search for APIs.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteBgpNetwork	The name of this action. Value: DeleteBgpNetwork
dstCidrBlock	String	Yes	10.110.192.12/32	The advertised BGP network.
RegionId	String	Yes	cn-hangzhou	The region to which the BGP network belongs. To query the region ID, call DescribeRegions.
routeId	String	Yes	vrt-bp1lhl0taikrteen80oxx	The ID of the VBR.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-0016e04115b	The client token that guarantees the idempotence of the request. This parameter value is generated by the client and must be unique. It must be 1 to 64 ASCII characters in length.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	22F4C006-D3BB-4F96-9FF9-4C8335276D70	The ID of the request.

Examples

Request example

```
https://vpc.aliyuncs.com/?Action=DeleteBgpNetwork
&DstCidrBlock=10.110.192.12/32
&RegionId=cn-hangzhou
```

```
& RouterId = vrt - bp1lhl0tai krteen80ox x
&< CommonParameters >
```

Response example

• XML format

```
< DeleteBgpNetworkResponse >
  < RequestId > 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 </
    RequestId >
</ DeleteBgpNetworkResponse >
```

• JSON format

```
{
  "RequestId ":" 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	InvalidRegionId.NotFound	Specified value of "regionId" is not supported.	The specified region ID does not exist.
400	QuotaExceeded.Bgp	bgp peer count per vbr quota exceed.	The BGP group quota of the VBR has been reached.
400	QuotaExceeded.Nqa	nqa count per vbr quota exceed.	The NQA quota of the VBR has been reached.
400	QuotaExceeded.BgpNetwork	bgp network count per vbr quota exceed.	The BGP network quota of the VBR has been reached.
400	InvalidPeerIpAddress	multi pconn peer ip can not be null.	The peer IP address of multiple physical connections cannot be null.
400	InvalidVbrNetwork	vbr network not exists	The specified VBR does not exist.
400	InvalidBgpGroup	bgp group not exists	The specified BGP group does not exist.
400	InvalidBgpName.Malformed	Specified Bgp Group name is not valid.	The name of the BGP group is invalid.

HTTP status code	Error code	Error message	Description
400	InvalidBgp Discription. Malformed	Specified Bgp Group description is not valid.	The description of the BGP group is invalid.
400	InvalidBgp Authkey. Malformed	Specified Bgp Group authkey is not valid.	The authentication key of the BGP group is invalid.
400	InvalidIP. Malformed	Ip malformed.	The IP address format is invalid.
400	InvalidPeerAsn. Malformed	invalid peer asn cannot equals aliyun asn:45104	The specified ASN cannot be the same as the Alibaba Cloud ASN.
400	InvalidParams. NotNull	invalid peer asn cannot equals aliyun asn:45104	The specified ASN cannot be the same as the Alibaba Cloud ASN.
400	InvalidParams. NotFound	vpc instance not found	The specified VPC does not exist.
400	InvalidParams. AlreadyExists	bgp network already exists	The specified BGP network already exists.
400	InvalidStatus. CannotOperate	invalid status cannot operate	The status of the resource does not permit this operation.

[See common error codes](#)

19.11 ModifyBgpPeerAttribute

Modifies the attributes of a BGP peer.

Debug

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

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ModifyBgpPeerAttribute	The name of this action. Value: ModifyBgpPeerAttribute
BgpPeerId	String	Yes	Bgp-awjhxxxxxxxx	The ID of the BGP peer.
RegionId	String	Yes	cn-shanghai	The region ID of the BGP group. To query the region ID, call DescribeRegions .
BgpGroupId	String	No	bgpg-wz9f62v4fbgxxxxxxxx	Optional. The ID of the BGP group.
ClientToken	String	No	02fb3da4-130e-11e9-8e44-001xxxxxxxx	Optional. Guarantees 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.
EnableBfd	Boolean	No	true	Optional. Indicates whether to enable the BFD function. Valid values: · true: Enable the BFD function. · false: Do not enable the BFD function.
PeerIpAddress	String	No	116.62.xx.xx	Optional. The IP address of the BGP peer.

Response parameters

Parameter	Type	Example value	Description
RequestId	String	D4B7649A-61BB-4C64-A586-1DFF1EDA6A42	The ID of the request.

Examples

Request example

```
https :// vpc . aliyuncs . com /? Action = ModifyBgpP eerAttribu
te
& BgpPeerId = Bgp - awjhxxxxxx xx
& RegionId = cn - shanghai
&< CommonPara meters >
```

Response examples

XML format

```
< CreateBgpP eerRespons e >
  < RequestId > 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 </
  RequestId >
</ CreateBgpP eerRespons e >
```

JSON format

```
{
  " RequestId ":" 0ED8D006 - F706 - 4D23 - 88ED - E11ED28DCA C0 "
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidRegionId.NotFound	The specified RegionId does not exist in our records.	The region ID you specified is invalid. Please check if the cloud service is available in the specified region.

[See common error codes.](#)