

# Alibaba Cloud

## Global Acceleration API reference

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# Document conventions

| Style                                                                                            | Description                                                                                                                       | Example                                                                                                                                                                                                 |
|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <b>Danger</b>  | A danger notice indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results. |  <b>Danger:</b><br>Resetting will result in the loss of user configuration data.                                       |
|  <b>Warning</b> | A warning notice indicates a situation that may cause major system changes, faults, physical injuries, and other adverse results. |  <b>Warning:</b><br>Restarting will cause business interruption. About 10 minutes are required to restart an instance. |
|  <b>Notice</b>  | A caution notice indicates warning information, supplementary instructions, and other content that the user must understand.      |  <b>Notice:</b><br>If the weight is set to 0, the server no longer receives new requests.                              |
|  <b>Note</b>  | A note indicates supplemental instructions, best practices, tips, and other content.                                              |  <b>Note:</b><br>You can use Ctrl + A to select all files.                                                            |
| >                                                                                                | Closing angle brackets are used to indicate a multi-level menu cascade.                                                           | Click <b>Settings</b> > <b>Network</b> > <b>Set network type</b> .                                                                                                                                      |
| <b>Bold</b>                                                                                      | Bold formatting is used for buttons, menus, page names, and other UI elements.                                                    | Click <b>OK</b> .                                                                                                                                                                                       |
| <code>Courier font</code>                                                                        | Courier font is used for commands                                                                                                 | Run the <code>cd /d C:/window</code> command to enter the Windows system folder.                                                                                                                        |
| <i>Italic</i>                                                                                    | Italic formatting is used for parameters and variables.                                                                           | <code>bae log list --instanceid</code><br><i>Instance_ID</i>                                                                                                                                            |
| [ ] or [a b]                                                                                     | This format is used for an optional value, where only one item can be selected.                                                   | <code>ipconfig [-all -t]</code>                                                                                                                                                                         |
| { } or {a b}                                                                                     | This format is used for a required value, where only one item can be selected.                                                    | <code>switch {active stand}</code>                                                                                                                                                                      |

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# 1. List of operations by function

The following tables list the API operations available for use in Global Accelerator (GA).

## Global Accelerator instances

| API                                 | Description                                           |
|-------------------------------------|-------------------------------------------------------|
| <a href="#">DescribeAccelerator</a> | Queries the information about a specific GA instance. |
| <a href="#">ListAccelerators</a>    | Queries GA instances.                                 |
| <a href="#">UpdateAccelerator</a>   | Modifies a GA instance.                               |
| <a href="#">CreateAccelerator</a>   | Creates a GA instance.                                |
| <a href="#">DeleteAccelerator</a>   | Deletes a specific GA instance.                       |

## Bandwidth plans

| API                                               | Description                                        |
|---------------------------------------------------|----------------------------------------------------|
| <a href="#">BandwidthPackageAddAccelerator</a>    | Associates a bandwidth plan with a GA instance.    |
| <a href="#">BandwidthPackageRemoveAccelerator</a> | Disassociates a bandwidth plan from a GA instance. |
| <a href="#">DescribeBandwidthPackage</a>          | Queries the information about a bandwidth plan.    |
| <a href="#">ListBandwidthPackages</a>             | Queries bandwidth plans.                           |
| <a href="#">UpdateBandwidthPackage</a>            | Modifies a bandwidth plan.                         |
| <a href="#">ReplaceBandwidthPackage</a>           | Replaces a bandwidth plan.                         |

## Acceleration regions

| API                           | Description                                                                           |
|-------------------------------|---------------------------------------------------------------------------------------|
| <a href="#">CreateIpSets</a>  | Creates an acceleration region.                                                       |
| <a href="#">DescribeIpSet</a> | Queries the information about an acceleration region.                                 |
| <a href="#">ListIpSets</a>    | Queries acceleration regions.                                                         |
| <a href="#">UpdateIpSet</a>   | Modifies the bandwidth of a specific region that is included in an acceleration area. |
| <a href="#">UpdateIpSets</a>  | Modifies the bandwidth of all regions that is included in an acceleration area.       |
| <a href="#">DeleteIpSet</a>   | Deletes a single acceleration region.                                                 |
| <a href="#">DeleteIpSets</a>  | Deletes multiple acceleration regions.                                                |

## Listeners

| API                              | Description                               |
|----------------------------------|-------------------------------------------|
| <a href="#">CreateListener</a>   | Creates a listener.                       |
| <a href="#">DescribeListener</a> | Queries the information about a listener. |
| <a href="#">ListListeners</a>    | Queries listeners.                        |
| <a href="#">UpdateListener</a>   | Modifies a listener.                      |
| <a href="#">DeleteListener</a>   | Deletes a listener.                       |

## Endpoint groups

| API                                          | Description                                              |
|----------------------------------------------|----------------------------------------------------------|
| <a href="#">CreateEndpointGroup</a>          | Creates an endpoint group.                               |
| <a href="#">DescribeEndpointGroup</a>        | Queries the information about a specific endpoint group. |
| <a href="#">ListEndpointGroups</a>           | Queries endpoint groups.                                 |
| <a href="#">UpdateEndpointGroup</a>          | Modifies an endpoint group.                              |
| <a href="#">UpdateEndpointGroupAttribute</a> | Modifies the name and description of an endpoint group.  |
| <a href="#">DeleteEndpointGroup</a>          | Deletes an endpoint group.                               |

## Areas and regions

| API                                 | Description                                                |
|-------------------------------------|------------------------------------------------------------|
| <a href="#">ListAccelerateAreas</a> | Queries available acceleration areas and regions.          |
| <a href="#">ListBusiRegions</a>     | Queries the regions that support the acceleration service. |
| <a href="#">DescribeRegions</a>     | Queries the regions where GA instances can be deployed.    |

## Forwarding rules

| API                                   | Description                |
|---------------------------------------|----------------------------|
| <a href="#">CreateForwardingRules</a> | Creates a forwarding rule. |
| <a href="#">UpdateForwardingRules</a> | Updates a forwarding rule. |

| API                                   | Description                                               |
|---------------------------------------|-----------------------------------------------------------|
| <a href="#">ListForwardingRules</a>   | Views the information about the created forwarding rules. |
| <a href="#">DeleteForwardingRules</a> | Deletes a forwarding rule                                 |

## Access control

| API                                        | Description                                              |
|--------------------------------------------|----------------------------------------------------------|
| <a href="#">UpdateAclAttribute</a>         | Modifies the attributes of an access control list (ACL). |
| <a href="#">AddEntriesToAcl</a>            | Adds an IP entry to an ACL.                              |
| <a href="#">ListAcls</a>                   | Queries ACLs of a region.                                |
| <a href="#">GetAcl</a>                     | Queries an ACL.                                          |
| <a href="#">DeleteAcl</a>                  | Deletes an ACL.                                          |
| <a href="#">AssociateAclsWithListener</a>  | Associates ACLs with a listener.                         |
| <a href="#">DissociateAclsFromListener</a> | Disassociates ACLs from a listener.                      |

## 2. Make API requests

To send a Global Accelerator API request, you must send an HTTP GET request to the Global Accelerator endpoint. You must add the request parameters that correspond to the API operation being called. After you call the API operation, the system returns a response. The request and response are encoded in the UTF-8 format.

### Request syntax

Global Accelerator API operations use the RPC protocol. You can call Global Accelerator API operations by sending HTTP GET requests.

The following request syntax is used:

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

where:

- **Endpoint:** the endpoint of the Global Accelerator API is `ga.cn-hangzhou.aliyuncs.com`.
- **Action:** the operation that you want to perform. For example, to query the information about an existing Global Accelerator instance, you must set the Action parameter to `DescribeAccelerator`.
- **Version:** the version of the Global Accelerator API. Set the value to `2019-11-20`.
- **Parameters:** the request parameters for the operation. Separate multiple parameters with ampersands (&).

Request parameters include both common parameters and operation-specific parameters. Common parameters are used for all Global Accelerator API calls regardless of the operation. For more information, see [Common parameters](#).

The following example shows how to call the `DescribeAccelerator` operation in Global Accelerator.

 **Note** The following code has been edited to ensure easy reading.

```
https://ga.cn-hangzhou.aliyuncs.com/?Action=DescribeAccelerator
&Format=xml
&Version=2019-11-20
&Signature=xxxx%xxxx%3D
&SignatureMethod=HMAC-SHA1
&SignatureNonce=15215528852396
&SignatureVersion=1.0
&AccessKeyId=key-test
&TimeStamp=2012-06-01T12:00:00Z
...
```

### Request signature

You must sign all API requests to ensure security. Alibaba Cloud uses the request signature to verify the identity of a request sender.

You must add the signature to the RPC API request in the following format:

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

where:

- **SignatureMethod**: the encryption method of the signature string. Set the value to HMAC-SHA1.
- **SignatureVersion**: the version of the signature encryption algorithm. Set the value to 1.0.
- **SignatureNonce**: a unique, random number used to prevent replay attacks. You must use different random numbers for different requests. We recommend that you use universally unique identifiers (UUIDs).
- **Signature**: the signature string generated by symmetrically encrypting the request by using the AccessKey secret.

Global Accelerator implements symmetric encryption with an AccessKey pair. This allows you to verify the identity of the request sender. An AccessKey pair is an identity credential issued to Alibaba Cloud accounts and RAM users. It is similar to a pair of username and password. An AccessKey pair consists of an AccessKey ID and an AccessKey secret. The AccessKey ID is used to verify the identity of the user. The AccessKey secret is used to encrypt the signature string. It is also used by the server to verify the signature string. The AccessKey secret must be kept confidential.

You must add the signature to the RPC API request in the following format:

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

DescribeAccelerator is used as an example. If the AccessKey ID is `testid` and the AccessKey secret is `testsecret`, the following sample code shows the original request URL:

```
http://ga.cn-hangzhou.aliyuncs.com/?Action=DescribeAccelerator
&TimeStamp=2016-02-23T12:46:24Z
&Format=XML
&AccessKeyId=testid
&SignatureMethod=HMAC-SHA1
&SignatureNonce=3ee8c1b8-83d3-44af-a94f-4e0ad82fd6cf
&Version=2019-11-20
&SignatureVersion=1.0
```

To calculate the signature, perform the following steps:

1. Build and encode a string-to-sign.

```
GET&%2F&AccessKeyId%3Dtestid%26Action%3DDescribeAccelerator%26Format%3DXML%26SignatureMethod%3DHMAC-SHA1%26SignatureNonce%3D3ee8c1b8-83d3-44af-a94f-4e0ad82fd6cf%26SignatureVersion%3D1.0%26TimeStamp%3D2016-02-23T12%253A46%253A24Z%26Version%3D2014-05-26
```

- i. Create a canonicalized query string by arranging the request parameters in alphabetical order. The request parameters include all common and operation-specific parameters except Signature.

When you use the GET method to submit a request, the request parameters are included as a part of the URI. The request parameters follow the question mark (?) and are separated with ampersands (&).

- ii. Encode the canonicalized query string in the UTF-8 format. The following table describes the encoding rules.

| Character                                                                                                                                                       | Encoding rule                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Uppercase letters (A-Z), lowercase letters (a-z), digits (0-9), and the following special characters: hyphens (-), underscores (_), periods (.), and tildes (~) | Not encoded.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Other characters                                                                                                                                                | Percent encoded in the <code>%XY</code> format. <code>XY</code> represents the ASCII code of the characters in hexadecimal notation. For example, double quotation marks (") are encoded as <code>%22</code> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Extended UTF-8 characters                                                                                                                                       | Encoded in the <code>%XY%ZA...</code> format.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Space characters                                                                                                                                                | <p>Encoded as <code>%20</code>. Do not encode space characters as plus signs (+).</p> <p>This encoding method is similar to the encoding algorithms in the <code>application/x-www-form-urlencoded</code> Multipurpose Internet Mail Extensions (MIME) format. For example, the <code>java.net.URLEncoder</code> class provided by the Java standard library uses the MIME format.</p> <p>You can encode spaces based on the encoding rule for the standard library. Then, you can replace the plus sign (+) in the encoded string with <code>%20</code>, the asterisk (*) with <code>%2A</code>, and <code>%7E</code> with the tilde (~). You can use the following <code>percentEncode</code> method to apply this algorithm.</p> <pre>private static final String ENCODING = "UTF-8"; private static String percentEncode(String value) throws UnsupportedEncodingException {     return value != null ?         URLEncoder.encode(value,             ENCODING).replace("+", "%20").replace("*",             "%2A").replace("%7E", "~") : null; }</pre> |

- iii. Concatenate the encoded parameter names and values with equal signs (=).
- iv. Arrange the parameter name and value pairs concatenated by equal signs based on the order specified in Step i, and connect them with ampersands (&) to produce the canonicalized query string.
2. Calculate the hash-based message authentication code (HMAC) value of the string-to-sign.

Add an ampersand (&) to the end of the AccessKey secret, and use the result as the key to calculate the HMAC value. In this example, the key is `testsecret&`.

```
CT9X0VtwR86fNWSnsc6v8YGOjuE=
```

3. Add the signature string to the request as the Signature parameter.

```
http://ga.cn-hangzhou.aliyuncs.com/?Action=DescribeAccelerator
&TimeStamp=2016-02-23T12:46:24Z
&Format=XML
&AccessKeyId=testid
&SignatureMethod=HMAC-SHA1
&SignatureNonce=3ee8c1b8-83d3-44af-a94f-4e0ad82fd6cf
&Version=2019-11-20
&SignatureVersion=1.0
&Signature=CT9X0VtwR86fNWSnsc6v****juE%3D
```

## 3.Common parameters

This topic describes the request and response parameters that each API operation uses.

### Common request parameters

Common request parameters

| Parameter            | Type   | Required? | Description                                                                                                                                                                                                                                                            |
|----------------------|--------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Format               | String | No        | The format in which the response is returned. Valid values: <i>JSON and XML. Default value: JSON.</i>                                                                                                                                                                  |
| Version              | String | Yes       | The API version in a date format of YYYY-MM-DD. Set this value to <i>2019-11-20</i> .                                                                                                                                                                                  |
| AccessKeyId          | String | Yes       | The AccessKey ID provided to you by Alibaba Cloud.                                                                                                                                                                                                                     |
| Signature            | String | Yes       | The signature string of the current request.                                                                                                                                                                                                                           |
| SignatureMethod      | String | Yes       | The algorithm that is used to calculate the request signature. Set the value to <i>HMAC-SHA1</i> .                                                                                                                                                                     |
| Timestamp            | String | Yes       | The time at which the request is signed. Specify the time in the ISO 8601 standard in the yyyy-MM-ddTHH:mm:ssZ format. The time must be in UTC.<br><br>For example, the time can be 2013-01-10T12:00:00Z. The time indicates 20:00:00 on January 10, 2013 (UTC+08:00). |
| SignatureVersion     | String | Yes       | The version of the signature algorithm. Set the value to <i>1.0</i> .                                                                                                                                                                                                  |
| SignatureNonce       | String | Yes       | A unique, random number that is used to prevent replay attacks.<br><br>You must use different random numbers for different requests.                                                                                                                                   |
| ResourceOwnerAccount | String | No        | The account that owns the resource to be accessed by this API request.                                                                                                                                                                                                 |

Examples

```
http://ga.aliyuncs.com/?Action=DescribeListener
&TimeStamp=2014-05-19T10%3A33%3A56Z
&Format=xml
&AccessKeyId=testid
&SignatureMethod=Hmac-SHA1
&SignatureNonce=NwDAxvLU6tFE0DVb
&Version=2019-11-20
&SignatureVersion=1.0
&Signature=Signature
```

## Common response parameters

Responses can be returned in the JSON or XML format. You can specify the response format in the request. The default response format is XML. Every response returns a unique RequestId regardless of whether the call is successful.

- A 2xx HTTP status code indicates a successful call.
- A 4xx or 5xx HTTP status code indicates a failed call.

Sample responses

- XML format

```
<? xml version="1.0" encoding="utf-8"? >
<!--The root node of the result-->
<Operation name+Response>
  <!--Return request tag-->
  <RequestId>4C467B38-3910-447D-87BC-AC049166F216</RequestId>
  <!--Return result data-->
</Operation name+Response>
```

- JSON format

```
{
  "RequestId": "4C467B38-3910-447D-87BC-AC049166F216",
  /*Return result data*/
}
```

## 4. Obtain an AccessKey pair

You can create an AccessKey pair for an Alibaba Cloud account or a RAM user. When you call API operations, you must use the AccessKey pair to complete identity verification.

### Context

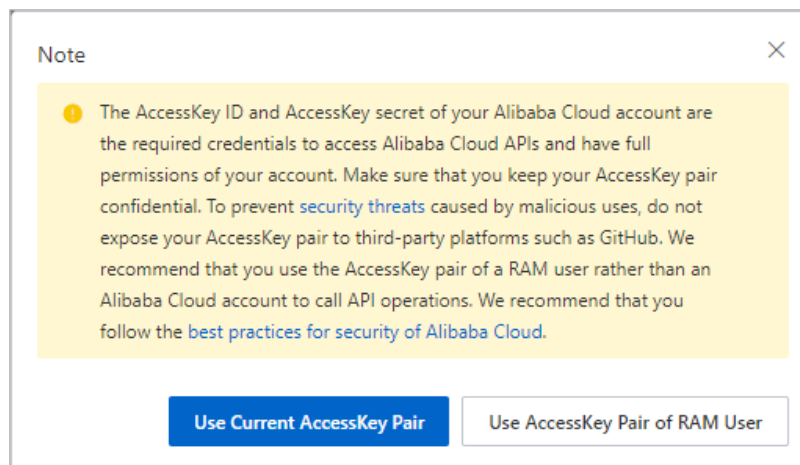
An AccessKey pair consists of an AccessKey ID and an AccessKey secret.

- AccessKey ID: verifies the identity of a user.
- AccessKey secret: verifies the password of a user. You must keep your AccessKey secret strictly confidential.

 **Warning** If the AccessKey pair of your Alibaba Cloud account is leaked, your resources are exposed to risks. We recommend that you use the AccessKey pair of a RAM user. This minimizes the possibility of AccessKey pair leaks.

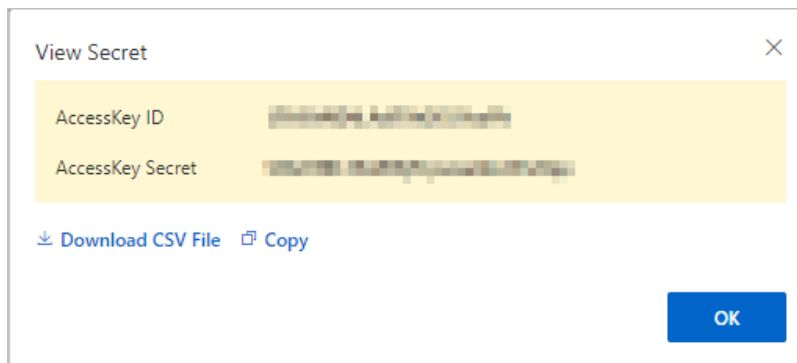
### Procedure

1. Log on to the [Alibaba Cloud Management Console](#) with your Alibaba Cloud account.
2. Move the pointer over the profile picture in the upper-right corner of the page and click **AccessKey Management**.
3. In the **Note** dialog box, select Use Current AccessKey Pair or Use AccessKey Pair of RAM User.

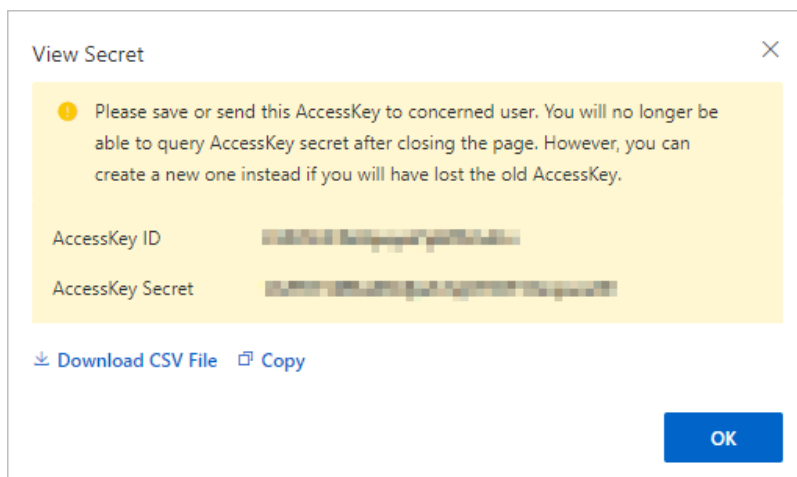


4. Obtain an AccessKey pair.
  - Obtain the AccessKey pair of your Alibaba Cloud account
    - a. Click **Use Current AccessKey Pair**.
    - b. On the **AccessKey Management** page, click **Create AccessKey**.
    - c. In the **MFA Verification** dialog box, enter the verification code in the Verification Code field and click **OK**.

- d. After you create an AccessKey pair, you can view the AccessKey ID and AccessKey secret in the **Create AccessKey** dialog box. You can also click **Download CSV File** or **Copy** to download or copy the AccessKey pair.



- o Obtain the AccessKey pair of a RAM user
  - a. Click **Use AccessKey Pair of RAM User**.
  - b. If you have not created a RAM user, you are automatically redirected to the **Users** page of the **RAM console**. On this page, create a RAM user. If a RAM user is already created, skip this step.
  - c. In the left-side navigation pane of the **RAM console**, choose **Identities > Users**, and find the RAM user whose AccessKey pair you want to obtain.
  - d. Click the username of the RAM user. In the **User AccessKeys** section of the **Authentication** tab, click **Create AccessKey**.
  - e. In the **MFA Verification** dialog box, enter the verification code and click **OK**.
  - f. After you create an AccessKey pair, you can view the AccessKey ID and AccessKey Secret in the **Create AccessKey** dialog box. You can also click **Download CSV File** or **Copy** to download or copy the AccessKey pair.



# 5.Global Accelerator instances

## 5.1. DescribeAccelerator

Queries the information about a Global Accelerator (GA) instance.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

### Request parameters

| Parameter     | Type   | Required | Example                  | Description                                                                           |
|---------------|--------|----------|--------------------------|---------------------------------------------------------------------------------------|
| Action        | String | Yes      | DescribeAccelerator      | The operation that you want to perform. Set the value to <b>DescribeAccelerator</b> . |
| AcceleratorId | String | Yes      | ga-bp1odcab8tmno0hdq**** | The ID of the GA instance to query.                                                   |
| RegionId      | String | Yes      | cn-hangzhou              | The region ID of the GA instance. Set the value to <b>cn-hangzhou</b> .               |

### Response parameters

| Parameter             | Type    | Example                  | Description                                                               |
|-----------------------|---------|--------------------------|---------------------------------------------------------------------------|
| AcceleratorId         | String  | ga-bp1odcab8tmno0hdq**** | The ID of the GA instance.                                                |
| BasicBandwidthPackage | Struct  |                          | The details of the basic bandwidth plan that is bound to the GA instance. |
| Bandwidth             | Integer | 2                        | The bandwidth that is provided by the basic bandwidth plan.               |

| Parameter                   | Type    | Example                        | Description                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------|---------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BandwidthType               | String  | Basic                          | The bandwidth type of the basic bandwidth plan. Valid values: <ul style="list-style-type: none"> <li><b>Basic</b>: the basic type of bandwidth used for the GA service.</li> <li><b>Enhanced</b>: the enhanced type of bandwidth used in the GA service.</li> <li><b>Advanced</b>: the advanced type of bandwidth used in the GA service.</li> </ul> |
| Instanceld                  | String  | gbwp-bp1d8xk8bg139j0fw***      | The ID of the basic bandwidth plan.                                                                                                                                                                                                                                                                                                                  |
| Cenld                       | String  | cen-hjkduu767hc****            | The ID of the Cloud Enterprise Network (CEN) instance to which the GA instance is attached.                                                                                                                                                                                                                                                          |
| CreateTime                  | Long    | 1577786252000                  | The time when the GA instance was created.                                                                                                                                                                                                                                                                                                           |
| CrossDomainBandwidthPackage | Struct  |                                | The details of the cross-border acceleration bandwidth plan that is bound to the GA instance.<br><br>This array is returned only after you query instances that are deployed in regions outside mainland China.                                                                                                                                      |
| Bandwidth                   | Integer | 2                              | The bandwidth that is provided by the cross-border acceleration bandwidth plan, in <b>Mbit/s</b> .                                                                                                                                                                                                                                                   |
| Instanceld                  | String  | gbwp-bp1d8xk8bg139j0fw***      | The ID of the cross-border acceleration bandwidth plan.                                                                                                                                                                                                                                                                                              |
| Ddosld                      | String  | ddoscoo-cn-zz11vq7j****        | The ID of the Anti-DDoS Pro instance or the Anti-DDoS Premium instance that was disassociated from the GA instance.                                                                                                                                                                                                                                  |
| Description                 | String  | Accelerator                    | The description of the GA instance.                                                                                                                                                                                                                                                                                                                  |
| DnsName                     | String  | ga-bp1j80t5****.uisnetwork.com | The Canonical Name (CNAME) that is assigned to the GA instance.                                                                                                                                                                                                                                                                                      |
| ExpiredTime                 | Long    | 1577786252000                  | The time when the GA instance expires.                                                                                                                                                                                                                                                                                                               |

| Parameter          | Type   | Example                                    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------|--------|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| InstanceChargeType | String | PREPAY                                     | The billing method of the GA instance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Name               | String | Accelerator                                | The name of the GA instance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| RegionId           | String | cn-hangzhou                                | The region ID of the GA instance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| RequestId          | String | 6FEA0CF3-D3B9-43E5-A304-D217037876A8       | The ID of the request.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| SecondDnsName      | String | ga-bp1f609c76zg6zuna***_1.aliyunga0047.com | The CNAME that is used to integrate the GA instance with the Anti-DDoS service.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Spec               | String | 1                                          | The size of the GA instance. Valid values: <ul style="list-style-type: none"><li>• 1: Small I</li><li>• 2: Small II</li><li>• 3: Small III</li><li>• 5: Medium I</li><li>• 8: Medium II</li><li>• 10: Medium III</li></ul>                                                                                                                                                                                                                                                                                                                                                           |
| State              | String | active                                     | The state of the GA instance. Valid values: <ul style="list-style-type: none"><li>• <b>init</b>: The instance is being initialized.</li><li>• <b>active</b>: The instance is in the running state.</li><li>• <b>configuring</b>: The instance is being configured.</li><li>• <b>binding</b>: A bandwidth plan is being bound to the instance.</li><li>• <b>unbinding</b>: A bandwidth plan is being unbound from the instance.</li><li>• <b>Deleting</b>: The instance is being deleted.</li><li>• <b>financialLocked</b>: The instance is locked due to overdue payments.</li></ul> |

## Examples

### Sample requests

```
http(s)://[Endpoint]/? Action=DescribeAccelerator
&AcceleratorId=ga-bp1odcab8tmno0hdq****
&<Common request parameters>
```

### Sample success responses

## XML format

```
<DescribeAcceleratorResponse>
  <DnsName>ga-bp1j80t5gulpw****.uisnetwork.com</DnsName>
  <Spec>1</Spec>
  <BasicBandwidthPackage>
    <BandwidthType>Basic</BandwidthType>
    <InstanceId>gbwp-bp1d8xk8bg139j0fw****</InstanceId>
    <Bandwidth>2</Bandwidth>
  </BasicBandwidthPackage>
  <State>active</State>
  <RegionId>cn-hangzhou</RegionId>
  <CreateTime>1581653081000</CreateTime>
  <RequestId>64966488-B3E3-41E2-9570-4596117EC12E</RequestId>
  <InstanceChargeType>PREPAY</InstanceChargeType>
  <ExpiredTime>1584201600000</ExpiredTime>
  <AcceleratorId>ga-bp1j80t5gulpwx12r****</AcceleratorId>
</DescribeAcceleratorResponse>
```

## JSON format

```
{
  "DnsName": "ga-bp1j80t5gulpw****.uisnetwork.com",
  "Spec": "1",
  "BasicBandwidthPackage": {
    "BandwidthType": "Basic",
    "InstanceId": "gbwp-bp1d8xk8bg139j0fw****",
    "Bandwidth": 2
  },
  "State": "active",
  "RegionId": "cn-hangzhou",
  "CreateTime": 1581653081000,
  "RequestId": "64966488-B3E3-41E2-9570-4596117EC12E",
  "InstanceChargeType": "PREPAY",
  "ExpiredTime": 1584201600000,
  "AcceleratorId": "ga-bp1j80t5gulpwx12r****"
}
```

## Error codes

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

## 5.2. ListAccelerators

Queries Global Accelerator (GA) instances.

### Debugging

Alibaba Cloud provides OpenAPI Explorer to simplify API usage. OpenAPI Explorer automatically calculates signature values. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

### Request parameters

| Parameter     | Type    | Required | Example                  | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------|---------|----------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action        | String  | Yes      | ListAccelerators         | The operation that you want to perform. Set the value to <b>ListAccelerators</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| RegionId      | String  | Yes      | cn-hangzhou              | The ID of the region where your GA instances are deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| PageNumber    | Integer | No       | 1                        | The number of the page to return. Default value: <b>1</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| PageSize      | Integer | No       | 10                       | The number of entries to return on each page. Maximum value: <b>50</b> . Default value: <b>10</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| AcceleratorId | String  | No       | ga-bp1odcab8tmno0hdq**** | The ID of the GA instance to query.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| State         | String  | No       | active                   | The state of the GA instances to query. Valid values: <ul style="list-style-type: none"><li>• <b>init</b>: specifies the instances that are being initialized.</li><li>• <b>active</b>: specifies the instances that are running.</li><li>• <b>configuring</b>: specifies the instances for which listeners are being configured.</li><li>• <b>binding</b>: specifies the instances to which bandwidth plans are being bound.</li><li>• <b>unbinding</b>: specifies the instances from which bandwidth plans are being unbound.</li><li>• <b>Deleting</b>: specifies the instances that are being deleted.</li><li>• <b>finacialLocked</b>: specifies the instances that are locked due to overdue payments.</li></ul> |

## Response parameters

| Parameter  | Type    | Example | Description                           |
|------------|---------|---------|---------------------------------------|
| TotalCount | Integer | 10      | The total number of entries returned. |

| Parameter     | Type                  | Example                                    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------|-----------------------|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PageSize      | Integer               | 10                                         | The number of entries returned per page.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| RequestId     | String                | DE77A7F3-3B74-41C0-A5BC-CAFD188C28B6       | The ID of the request.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Accelerators  | Array of Accelerators |                                            | The information about the returned GA instances.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| DnsName       | String                | ga-bp1j80t5****.uisnetwork.com             | The canonical name (CNAME) that is assigned to the GA instance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Type          | String                | None                                       | A deprecated parameter.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| SecondDnsName | String                | ga-bp1f609c76zg6zuna***_1.aliyunga0047.com | The CNAME that is used to associate the GA instance with an Anti-DDoS Pro instance or an Anti-DDoS Premium instance.                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Spec          | String                | 1                                          | The specification of the GA instance. Valid values: <ul style="list-style-type: none"> <li>1: Small I</li> <li>2: Small II</li> <li>3: Small III</li> <li>5: Medium I</li> <li>8: Medium II</li> <li>10: Medium III</li> </ul>                                                                                                                                                                                                                                                                                                                                                   |
| State         | String                | active                                     | The state of the GA instance. Valid values: <ul style="list-style-type: none"> <li><b>init</b>: The instance is being initialized.</li> <li><b>active</b>: The instance is running.</li> <li><b>configuring</b>: A listener is being configured for the instance.</li> <li><b>binding</b>: A bandwidth plan is being bound to the instance.</li> <li><b>unbinding</b>: A bandwidth plan is being unbound from the instance.</li> <li><b>Deleting</b>: The instance is being deleted.</li> <li><b>financialLocked</b>: The instance is locked due to overdue payments.</li> </ul> |
| CreateTime    | Long                  | 1577786252000                              | The timestamp that represents the time when the GA instance was created.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

| Parameter             | Type    | Example                   | Description                                                                                                                                                                                                                                                                   |
|-----------------------|---------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CenId                 | String  | cen-hjfufhjfuwff****      | The ID of the Cloud Enterprise Network instance that is associated with the GA instance.                                                                                                                                                                                      |
| DdosId                | String  | ddoscoo-cn-zz11vq7j****   | The ID of the Anti-DDoS Pro or Anti-DDoS Premium instance that is associated with the GA instance.                                                                                                                                                                            |
| BasicBandwidthPackage | Object  |                           | The details of the basic bandwidth plan that is bound to the GA instance.                                                                                                                                                                                                     |
| Bandwidth             | Integer | 2                         | The bandwidth that is provided by the basic bandwidth plan. Unit: <b>Mbit/s</b> .                                                                                                                                                                                             |
| BandwidthType         | String  | Basic                     | The type of the bandwidth that is provided by the basic bandwidth plan. Valid values: <ul style="list-style-type: none"><li>• <b>Basic</b>: the basic bandwidth</li><li>• <b>Enhanced</b>: the enhanced bandwidth</li><li>• <b>Advanced</b>: the advanced bandwidth</li></ul> |
| Instanceld            | String  | gbwp-bp1d8xk8bg139j0fw*** | The ID of the basic bandwidth plan.                                                                                                                                                                                                                                           |
| RegionId              | String  | cn-hangzhou               | The ID of the region where the GA instance is deployed. The value is <b>cn-hangzhou</b> .                                                                                                                                                                                     |
| InstanceChargeType    | String  | PREPAY                    | The billing method of the GA instance. The value is <b>PREPAY</b> . This value indicates the subscription billing method.                                                                                                                                                     |
| AcceleratorId         | String  | ga-bp1odcab8tmno0hdq****  | The ID of the GA instance.                                                                                                                                                                                                                                                    |
| Description           | String  | Accelerator               | The description of the GA instance.                                                                                                                                                                                                                                           |
| Bandwidth             | Integer | 5                         | The bandwidth of the GA instance. Unit: <b>Mbit/s</b> .                                                                                                                                                                                                                       |
| ExpiredTime           | Long    | 1577786252000             | The timestamp that represents the time when the GA instance expires.                                                                                                                                                                                                          |

| Parameter                   | Type    | Example                   | Description                                                                                                            |
|-----------------------------|---------|---------------------------|------------------------------------------------------------------------------------------------------------------------|
| Name                        | String  | Accelerator               | The name of the GA instance.                                                                                           |
| CrossDomainBandwidthPackage | Object  |                           | The details of the cross-border bandwidth plan that is bound to the GA instance for cross-border acceleration.         |
| Bandwidth                   | Integer | 2                         | The bandwidth that is provided by the cross-border bandwidth plan for cross-border acceleration. Unit: <b>Mbit/s</b> . |
| InstanceId                  | String  | gbwp-bp1d8xk8bg139j0fw*** | The ID of the cross-border bandwidth plan.                                                                             |
| PageNumber                  | Integer | 1                         | The page number of the returned page.                                                                                  |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=ListAccelerators
&RegionId=cn-hangzhou
&PageNumber=1
&PageSize=10
&AcceleratorId=ga-bp1odcab8tmno0hdq****
&State=active
&<Common request parameters>
```

### Sample success responses

**XML** format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<ListAcceleratorsResponse>
  <TotalCount>10</TotalCount>
  <PageSize>10</PageSize>
  <RequestId>DE77A7F3-3B74-41C0-A5BC-CAFD188C28B6 </RequestId>
  <Accelerators>
    <DnsName>ga-bp1j80t5****.uisnetwork.com</DnsName>
    <Type>None</Type>
    <SecondDnsName>ga-bp1f609c76zg6zuna****-1.aliyunga0047.com</SecondDnsName>
    <Spec>1</Spec>
    <State>active</State>
    <CreateTime>1577786252000</CreateTime>
    <CenId>cen-hjfufhjfuwff****</CenId>
    <DdosId>ddoscoo-cn-zz11vq7j****</DdosId>
    <BasicBandwidthPackage>
      <Bandwidth>2</Bandwidth>
      <BandwidthType>Basic</BandwidthType>
      <InstanceId>gbwp-bp1d8xk8bg139j0fw****</InstanceId>
    </BasicBandwidthPackage>
    <RegionId>cn-hangzhou</RegionId>
    <InstanceChargeType>PREPAY</InstanceChargeType>
    <AcceleratorId>ga-bp1odcab8tmno0hdq****</AcceleratorId>
    <Description>Accelerator</Description>
    <Bandwidth>5</Bandwidth>
    <ExpiredTime>1577786252000</ExpiredTime>
    <Name>Accelerator</Name>
    <CrossDomainBandwidthPackage>
      <Bandwidth>2</Bandwidth>
      <InstanceId>gbwp-bp1d8xk8bg139j0fw****</InstanceId>
    </CrossDomainBandwidthPackage>
  </Accelerators>
  <PageNumber>1</PageNumber>
</ListAcceleratorsResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "TotalCount": 10,
  "PageSize": 10,
  "RequestId": "DE77A7F3-3B74-41C0-A5BC-CAFD188C28B6\t",
  "Accelerators": [{
    "DnsName": "ga-bp1j80t5****.uisnetwork.com",
    "Type": "None",
    "SecondDnsName": "ga-bp1f609c76zg6zuna****-1.aliyunga0047.com",
    "Spec": "1",
    "State": "active",
    "CreateTime": 1577786252000,
    "CenId": "cen-hjfufhjfuwff****",
    "DdosId": "ddoscoo-cn-zz11vq7j****",
    "BasicBandwidthPackage": {
      "Bandwidth": 2,
      "BandwidthType": "Basic",
      "InstanceId": "gbwp-bp1d8xk8bg139j0fw****"
    },
    "RegionId": "cn-hangzhou",
    "InstanceChargeType": "PREPAY",
    "AcceleratorId": "ga-bp1odcab8tmno0hdq****",
    "Description": "Accelerator",
    "Bandwidth": 5,
    "ExpiredTime": 1577786252000,
    "Name": "Accelerator",
    "CrossDomainBandwidthPackage": {
      "Bandwidth": 2,
      "InstanceId": "gbwp-bp1d8xk8bg139j0fw****"
    }
  }],
  "PageNumber": 1
}
```

## Error codes

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

## 5.3. UpdateAccelerator

Modifies a Global Accelerator (GA) instance

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

### Request parameters

| Parameter | Type | Required | Example | Description |
|-----------|------|----------|---------|-------------|
|-----------|------|----------|---------|-------------|

| Parameter     | Type   | Required | Example                  | Description                                                                                                                                                                                                                                                                                                                                                              |
|---------------|--------|----------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action        | String | Yes      | UpdateAccelerator        | The operation that you want to perform. Set the value to <b>UpdateAccelerator</b> .                                                                                                                                                                                                                                                                                      |
| AcceleratorId | String | Yes      | ga-bp1odcab8tmno0hdq**** | The ID of the GA instance.                                                                                                                                                                                                                                                                                                                                               |
| RegionId      | String | No       | cn-hangzhou              | The region where the GA instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                                                                                                                                      |
| ClientToken   | String | No       | 123e4567****             | The client token that is used to ensure the idempotence of the request. You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length.                                                                                             |
| Name          | String | No       | Accelerator              | The name of the GA instance.<br>The name must be 2 to 128 characters in length, and can contain digits, underscores (_), and hyphens (-). It must start with a letter.                                                                                                                                                                                                   |
| Description   | String | No       | Accelerator              | The description of the GA instance.                                                                                                                                                                                                                                                                                                                                      |
| Spec          | String | No       | 1                        | The specification of the GA instance.<br>Valid values: <ul style="list-style-type: none"><li>• 1: Small I</li><li>• 2: Small II</li><li>• 3: Small III</li><li>• 5: Medium I</li><li>• 8: Medium II</li><li>• 10: Medium III</li></ul> Different instance specifications have different definitions. For more information, see <a href="#">Instance specifications</a> . |

| Parameter     | Type    | Required | Example | Description                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------|---------|----------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AutoPay       | Boolean | No       | true    | <p>Specifies whether to enable automatic payments. Valid values:</p> <ul style="list-style-type: none"><li>• <b>false</b>: disables automatic payments. This is the default value. After an order is generated, you must go to the Order Center to complete the payment.</li><li>• <b>true</b>: enables automatic payments. After an order is generated, the system automatically deducts your account balance to pay for the order.</li></ul> |
| AutoUseCoupon | Boolean | No       | false   | <p>Specifies whether to automatically pay for bills with coupons. Valid values:</p> <ul style="list-style-type: none"><li>• <b>true</b>: uses coupons.</li><li>• <b>false</b>: does not use coupons. This is the default value.</li></ul> <div> <b>Note</b> Only if <b>AutoPay</b> is set to <b>true</b>, this parameter is available.</div>                 |

## Response parameters

| Parameter | Type   | Example                              | Description            |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | 6FEA0CF3-D3B9-43E5-A304-D217037876A8 | The ID of the request. |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=UpdateAccelerator
&AcceleratorId=ga-bp1odcab8tmno0hdq****
&RegionId=cn-hangzhou
&<Common request parameters>
```

### Sample success responses

#### XML format

```
<UpdateAcceleratorResponse>
  <RequestId>6FEA0CF3-D3B9-43E5-A304-D217037876A8</RequestId>
</UpdateAcceleratorResponse>
```

#### JSON format

```
{
  "RequestId":"6FEA0CF3-D3B9-43E5-A304-D217037876A8"
}
```

## Error codes

| HttpCode | Error code             | Error message                                     | Description                                                                           |
|----------|------------------------|---------------------------------------------------|---------------------------------------------------------------------------------------|
| 400      | NotExist.Accelerator   | The accelerated instance does not exist.          | The error message returned because the specified GA instance does not exist.          |
| 400      | IllegalParameter.Spec  | The specified Spec is invalid.                    | The error message returned because Spec is set to an invalid value.                   |
| 400      | StateError.Accelerator | The state of the accelerated instance is invalid. | The error message returned because the state of the specified GA instance is invalid. |

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

## 5.4. CreateAccelerator

Creates a Global Accelerator (GA) instance.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates a sample code of the operation for different SDKs.

### Request parameters

| Parameter | Type   | Required | Example           | Description                                                                                   |
|-----------|--------|----------|-------------------|-----------------------------------------------------------------------------------------------|
| Action    | String | Yes      | CreateAccelerator | The operation that you want to perform. Set the value to <b>CreateAccelerator</b> .           |
| RegionId  | String | Yes      | cn-hangzhou       | The ID of the region where the GA instance is deployed. Set the value to <b>cn-hangzhou</b> . |

| Parameter    | Type    | Required | Example      | Description                                                                                                                                                                                                                                                                                                                                                    |
|--------------|---------|----------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ClientToken  | String  | No       | 123e4567**** | <p>The client token that is used to ensure the idempotence of the request.</p> <p>You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length.</p>                                                                     |
| Name         | String  | No       | test         | <p>The name of the GA instance.</p> <p>The name must be 2 to 128 characters in length and can contain letters, digits, underscores (_), and hyphens (-). It must start with a letter.</p>                                                                                                                                                                      |
| Duration     | Integer | Yes      | 1            | <p>The subscription duration.</p> <ul style="list-style-type: none"> <li>• If <b>PricingCycle</b> is set to <b>Month</b>, <b>Duration</b> can be set from 1 to 9.</li> <li>• If <b>PricingCycle</b> is set to <b>Year</b>, <b>Duration</b> can be set from 1 to 3.</li> </ul>                                                                                  |
| PricingCycle | String  | Yes      | Month        | <p>The billing cycle. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>Month</b>: billed on a monthly basis.</li> <li>• <b>Year</b>: billed on an annual basis.</li> </ul>                                                                                                                                                                        |
| Spec         | String  | Yes      | 1            | <p>The type of the GA instance. Valid values:</p> <ul style="list-style-type: none"> <li>• 1: Small I</li> <li>• 2: Small II</li> <li>• 3: Small III</li> <li>• 5: Medium I</li> <li>• 8: Medium II</li> <li>• 10: Medium III</li> </ul> <p>Different instance types have different definitions. For more information, see <a href="#">Instance types</a>.</p> |

| Parameter     | Type    | Required | Example | Description                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------|---------|----------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AutoPay       | Boolean | No       | true    | <p>Specifies whether to enable automatic payments. Valid values:</p> <ul style="list-style-type: none"><li>• <b>false</b>: disables automatic payments. This is the default value. After an order is generated, you must go to the Order Center to complete the payment.</li><li>• <b>true</b>: enables automatic payments. After an order is generated, the system automatically deducts your account balance to pay for the order.</li></ul> |
| AutoUseCoupon | String  | No       | true    | <p>Specifies whether to automatically pay for bills by using coupons. Valid values:</p> <ul style="list-style-type: none"><li>• <b>true</b>: uses coupons.</li><li>• <b>false</b>: does not use coupons. This is the default value.</li></ul> <div> <b>Note</b> Only if <b>AutoPay</b> is set to <b>true</b>, this parameter is available.</div>            |

## Response parameters

| Parameter     | Type   | Example                              | Description                                                                                                   |
|---------------|--------|--------------------------------------|---------------------------------------------------------------------------------------------------------------|
| RequestId     | String | F591955F-5CB5-4CCE-A75D-17CF2085CE22 | The ID of the instance.                                                                                       |
| OrderId       | String | 2082574365                           | The ID of the order.<br>If bills are not automatically paid, go to the Order Center to complete the payments. |
| AcceleratorId | String | ga-bp17frjrh0udz4qz****              | The ID of the GA instance.                                                                                    |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=CreateAccelerator
&RegionId=cn-hangzhou
&ClientToken=123e4567****
&Name=test
&Duration=1
&PricingCycle=Month
&Spec=1
&AutoPay=true
&AutoUseCoupon=true
&PromotionOptionNo=None
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<CreateAcceleratorResponse>
  <RequestId>F591955F-5CB5-4CCE-A75D-17CF2085CE22</RequestId>
  <OrderId>2082574365</OrderId>
  <AcceleratorId>ga-bp17frjjh0udz4qz****</AcceleratorId>
</CreateAcceleratorResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "F591955F-5CB5-4CCE-A75D-17CF2085CE22",
  "OrderId": "2082574365",
  "AcceleratorId": "ga-bp17frjjh0udz4qz****"
}
```

## Error codes

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

## 5.5. DeleteAccelerator

Deletes a specific Global Accelerator (GA) instance.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates a sample code of the operation for different SDKs.

### Request parameters

| Parameter | Type | Required | Example | Description |
|-----------|------|----------|---------|-------------|
|-----------|------|----------|---------|-------------|

| Parameter     | Type   | Required | Example                  | Description                                                                                   |
|---------------|--------|----------|--------------------------|-----------------------------------------------------------------------------------------------|
| Action        | String | Yes      | DeleteAccelerator        | The operation that you want to perform. Set the value to <b>DeleteAccelerator</b> .           |
| RegionId      | String | Yes      | cn-hangzhou              | The ID of the region where the GA instance is deployed. Set the value to <b>cn-hangzhou</b> . |
| AcceleratorId | String | Yes      | ga-bp1odcab8tmno0hdq**** | The ID of the GA instance that you want to delete.                                            |

## Response parameters

| Parameter     | Type   | Example                              | Description                |
|---------------|--------|--------------------------------------|----------------------------|
| RequestId     | String | 6FEA0CF3-D3B9-43E5-A304-D217037876A8 | The ID of the request.     |
| AcceleratorId | String | ga-bp1odcab8tmno0hdq****             | The ID of the GA instance. |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=DeleteAccelerator
&RegionId=cn-hangzhou
&AcceleratorId=ga-bp1odcab8tmno0hdq****
&<Common request parameters>
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<DeleteAcceleratorResponse>
  <RequestId>6FEA0CF3-D3B9-43E5-A304-D217037876A8</RequestId>
  <AcceleratorId>ga-bp1odcab8tmno0hdq****</AcceleratorId>
</DeleteAcceleratorResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "6FEA0CF3-D3B9-43E5-A304-D217037876A8",
  "AcceleratorId": "ga-bp1odcab8tmno0hdq*****"
}
```

## Error codes

| HttpCode | Error code             | Error message                                                     | Description                                                                                |
|----------|------------------------|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| 400      | NotExist.Accelerator   | The accelerated instance does not exist.                          | The error message returned because the specified GA instance does not exist.               |
| 400      | StateError.Accelerator | The state of the accelerated instance is invalid.                 | The error message returned because the specified GA instance is invalid.                   |
| 400      | BindExist.Accelerator  | The accelerated instance is already bound to a bandwidth package. | The error message returned because the specified GA instance is bound to a bandwidth plan. |
| 400      | Exist.IpSet            | The IpSet already exists.                                         | The error message returned because the specified acceleration area already exists.         |
| 400      | Exist.Listener         | The listener already exists.                                      | The error message returned because the specified listener already exists.                  |

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

## 5.6. CreateSpareIps

Creates spare IP addresses for a canonical name (CNAME) that is assigned to a Global Accelerator (GA) instance. If the acceleration service within the acceleration area of your GA instance becomes unavailable, GA redirects the access traffic to the spare IP addresses.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

### Request parameters

| Parameter | Type   | Required | Example        | Description                                                                      |
|-----------|--------|----------|----------------|----------------------------------------------------------------------------------|
| Action    | String | Yes      | CreateSpareIps | The operation that you want to perform. Set the value to <b>CreateSpareIps</b> . |

| Parameter     | Type    | Required | Example                              | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------|---------|----------|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RegionId      | String  | Yes      | cn-hangzhou                          | The ID of the region where the GA instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| ClientToken   | String  | No       | 1F4B6A4A-C89E-489E-BAF1-52777EE148EF | The client token that is used to ensure the idempotence of the request.<br>You can use the client to generate the value. Make sure that the value is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| DryRun        | Boolean | No       | true                                 | Specifies whether only to precheck the request. Valid values:<br><ul style="list-style-type: none"> <li><b>true</b>: only prechecks the request. If this value is used, the system does not create spare IP addresses after the request passes the precheck. The system checks the required parameters, request format, and service limits. If the request fails the precheck, the system returns an error code based on the cause of the failure. If the request passes the precheck, the system returns the <b>DryRunOperation</b> error code.</li> <li><b>false</b>: prechecks the request and then sends the request if the request passes the precheck. This value is the default value. After the request passes the precheck, the system returns a 2XX HTTP status code and creates spare IP addresses.</li> </ul> |
| AcceleratorId | String  | Yes      | ga-bp1odcab8tmno0hdq****             | The ID of the GA instance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| SpareIps.N    | String  | Yes      | ['127.0.XX.XX', '139.0.XX.XX']       | The spare IP addresses to be created for the CNAME. If the acceleration service within the acceleration area of the GA instance becomes unavailable, GA redirects the access traffic to the spare IP addresses.<br><br>Separate IP addresses with commas (,). Valid values of N: 0 to 2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

## Response parameters

| Parameter | Type   | Example                              | Description            |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | 6FEA0CF3-D3B9-43E5-A304-D217037876A8 | The ID of the request. |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=CreateSpareIps
&RegionId=cn-hangzhou
&ClientToken=1F4B6A4A-C89E-489E-BAF1-52777EE148EF
&DryRun=true
&AcceleratorId=ga-bp1odcab8tmno0hdq****
&SpareIps=[['127.0.XX.XX', '139.0.XX.XX']]
&<Common request parameters>
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<CreateSpareIpsResponse>
  <RequestId>6FEA0CF3-D3B9-43E5-A304-D217037876A8</RequestId>
</CreateSpareIpsResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "6FEA0CF3-D3B9-43E5-A304-D217037876A8"
}
```

## Error codes

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

# 5.7. ListSpareIps

Queries the information about the spare IP addresses that are associated with the domain name to which a CNAME record points.

## Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

## Request parameters

| Parameter     | Type    | Required | Example                              | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------|---------|----------|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action        | String  | Yes      | ListSparelps                         | The operation that you want to perform. Set the value to <b>ListSparelps</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| RegionId      | String  | Yes      | cn-hangzhou                          | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| ClientToken   | String  | No       | 1F4B6A4A-C89E-489E-BAF1-52777EE148EF | <p>The client token that is used to ensure the idempotence of the request.</p> <p>You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can only contain ASCII characters and cannot exceed 64 characters in length.</p>                                                                                                                                                                                                                                                                                                                                   |
| DryRun        | Boolean | No       | true                                 | <p>Specifies whether only to precheck the request. Valid values:</p> <ul style="list-style-type: none"><li><b>true</b>: prechecks the request without creating resources. The system checks the required parameters, request format, and service limits. If the request fails the precheck, the system returns an error code based on the cause of the failure. If the precheck is successful, the error code <b>DryRunOperation</b> is returned.</li><li><b>false</b>: sends the request. If the precheck is successful, a 2xx HTTP status code is returned and the operation is performed. Default value: false.</li></ul> |
| AcceleratorId | String  | Yes      | ga-bp1odcab8tmno0hdq****             | The ID of the GA instance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

## Response parameters

| Parameter | Type   | Example                              | Description            |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | 6FEA0CF3-D3B9-43E5-A304-D217037876A8 | The ID of the request. |

| Parameter | Type              | Example     | Description                                                                                                                                                                                                                                                                   |
|-----------|-------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SpareIps  | Array of SpareIps |             | The spare IP addresses that are associated with the domain name to which the CNAME record points.                                                                                                                                                                             |
| SpareIp   | String            | 127.0.xx.xx | The spare IP address that is associated with the domain name to which the CNAME record points. When an error occurs in the acceleration area, traffic is routed to the spare IP address.                                                                                      |
| State     | String            | active      | The status of the spare IP address. The spare IP address is associated with the domain name to which the CNAME record points. <ul style="list-style-type: none"><li>• <b>active</b>: The IP address is available.</li><li>• <b>inuse</b>: The IP address is in use.</li></ul> |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=ListSpareIps
&RegionId=cn-hangzhou
&ClientToken=1F4B6A4A-C89E-489E-BAF1-52777EE148EF
&DryRun=true
&AcceleratorId=ga-bp1odcab8tmno0hdq****
&<Common request parameters>
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<ListSpareIpsResponse>
  <RequestId>6FEA0CF3-D3B9-43E5-A304-D217037876A8</RequestId>
  <SpareIps>
    <SpareIp>127.0.xx.xx</SpareIp>
    <State>active</State>
  </SpareIps>
</ListSpareIpsResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "6FEA0CF3-D3B9-43E5-A304-D217037876A8",
  "SpareIps": [{
    "SpareIp": "127.0.xx.xx",
    "State": "active"
  }]
}
```

## Error codes

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

## 5.8. GetSpareIp

Queries the status of a spare IP address that is associated with the domain name to which a CNAME record points.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

### Request parameters

| Parameter   | Type   | Required | Example                              | Description                                                                                                                                                                                                                                                                                |
|-------------|--------|----------|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action      | String | Yes      | GetSpareIp                           | The operation that you want to perform. Set the value to <b>GetSpareIp</b> .                                                                                                                                                                                                               |
| RegionId    | String | Yes      | cn-hangzhou                          | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                         |
| ClientToken | String | No       | 1F4B6A4A-C89E-489E-BAF1-52777EE148EF | <p>The client token that is used to ensure the idempotence of the request.</p> <p>You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can only contain ASCII characters and cannot exceed 64 characters in length.</p> |

| Parameter     | Type    | Required | Example                  | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------|---------|----------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DryRun        | Boolean | No       | true                     | <p>Specifies whether only to precheck the request. Valid values:</p> <ul style="list-style-type: none"><li>• <b>true</b>: prechecks the request without creating resources. The system checks the required parameters, request format, and service limits. If the precheck fails, an error message is returned. If the precheck is successful, the error code <b>DryRunOperation</b> is returned.</li><li>• <b>false</b>: sends the request. If the precheck is successful, a 2xx HTTP status code is returned and the operation is performed. Default value: false.</li></ul> |
| AcceleratorId | String  | Yes      | ga-bp1odcab8tmno0hdq**** | The ID of the GA instance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| SpareIp       | String  | Yes      | 127.0.xx.xx              | The spare IP address that is associated with the domain name to which the CNAME record points. When an error occurs in the acceleration area, traffic is routed to the spare IP address.                                                                                                                                                                                                                                                                                                                                                                                       |

## Response parameters

| Parameter | Type   | Example                              | Description                                                                                                                                                                                                                                                                          |
|-----------|--------|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RequestId | String | 6FEA0CF3-D3B9-43E5-A304-D217037876A8 | The ID of the request.                                                                                                                                                                                                                                                               |
| State     | String | active                               | <p>The status of the spare IP address. The spare IP address is associated with the domain name to which the CNAME record points.</p> <ul style="list-style-type: none"><li>• <b>active</b>: The IP address is available.</li><li>• <b>inuse</b>: The IP address is in use.</li></ul> |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=GetSpareIp
&RegionId=cn-hangzhou
&ClientToken=1F4B6A4A-C89E-489E-BAF1-52777EE148EF
&DryRun=true
&AcceleratorId=ga-bp1odcab8tmno0hdq****
&SpareIp=127.0.xx.xx
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<GetSpareIpResponse>
  <RequestId>6FEA0CF3-D3B9-43E5-A304-D217037876A8</RequestId>
  <State>active</State>
</GetSpareIpResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "6FEA0CF3-D3B9-43E5-A304-D217037876A8",
  "State": "active"
}
```

## Error codes

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

## 5.9. DeleteSpareIps

Deletes spare IP addresses for the canonical name (CNAME) that is assigned to a Global Accelerator (GA) instance.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

### Request parameters

| Parameter | Type   | Required | Example        | Description                                                                      |
|-----------|--------|----------|----------------|----------------------------------------------------------------------------------|
| Action    | String | Yes      | DeleteSpareIps | The operation that you want to perform. Set the value to <b>DeleteSpareIps</b> . |

| Parameter     | Type    | Required | Example                              | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------|---------|----------|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RegionId      | String  | Yes      | cn-hangzhou                          | The ID of the region where the GA instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| ClientToken   | String  | No       | 1F4B6A4A-C89E-489E-BAF1-52777EE148EF | The client token that is used to ensure the idempotence of the request.<br><br>You can use the client to generate the value. Make sure that the value is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| DryRun        | Boolean | No       | true                                 | Specifies whether only to precheck the request. Valid values:<br><ul style="list-style-type: none"> <li><b>true</b>: only prechecks the request. If this value is used, the system does not delete spare IP addresses after the request passes the precheck. The system checks the required parameters, request format, and service limits. If the request fails the precheck, the system returns an error code based on the cause of the failure. If the request passes the precheck, the system returns the <b>DryRunOperation</b> error code.</li> <li><b>false</b>: prechecks the request and then sends the request if the request passes the precheck. This value is the default value. After the request passes the precheck, the system returns a 2XX HTTP status code and deletes the specified spare IP addresses.</li> </ul> |
| AcceleratorId | String  | Yes      | ga-bp1odcab8tmno0hdq****             | The ID of the GA instance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| SpareIps.N    | String  | Yes      | ['127.0.XX.XX', '139.0.XX.XX']       | The spare IP addresses to be deleted. If the acceleration service within the acceleration area of the GA instance becomes unavailable, GA redirects the access traffic to the spare IP addresses.<br><br>Separate IP addresses with commas (,). Valid values of N: <b>0</b> to <b>2</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

## Response parameters

| Parameter | Type   | Example                              | Description            |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | 6FEA0CF3-D3B9-43E5-A304-D217037876A8 | The ID of the request. |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=DeleteSpareIps
&RegionId=cn-hangzhou
&ClientToken=1F4B6A4A-C89E-489E-BAF1-52777EE148EF
&DryRun=true
&AcceleratorId=ga-bp1odcab8tmno0hdq****
&SpareIps=[['127.0.XX.XX', '139.0.XX.XX']]
&<Common request parameters>
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<DeleteSpareIpsResponse>
  <RequestId>6FEA0CF3-D3B9-43E5-A304-D217037876A8</RequestId>
</DeleteSpareIpsResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "6FEA0CF3-D3B9-43E5-A304-D217037876A8"
}
```

## Error codes

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

# 5.10. UpdateAcceleratorConfirm

Confirms the modified specifications of a specified Global Accelerator (GA) instance.

## Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

## Request parameters

| Parameter     | Type   | Required | Example                  | Description                                                                                |
|---------------|--------|----------|--------------------------|--------------------------------------------------------------------------------------------|
| Action        | String | Yes      | UpdateAcceleratorConfirm | The operation that you want to perform. Set the value to <b>UpdateAcceleratorConfirm</b> . |
| RegionId      | String | Yes      | cn-hangzhou              | The region where the GA instance is deployed. Set the value to <b>cn-hangzhou</b> .        |
| AcceleratorId | String | Yes      | ga-bp1odcab8tmno0hdq**** | The ID of the GA instance.                                                                 |

## Response parameters

| Parameter | Type   | Example                              | Description            |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | 6FEA0CF3-D3B9-43E5-A304-D217037876A8 | The ID of the request. |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=UpdateAcceleratorConfirm
&RegionId=cn-hangzhou
&AcceleratorId=ga-bp1odcab8tmno0hdq****
&<Common request parameters>
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<UpdateAcceleratorConfirmResponse>
  <RequestId>6FEA0CF3-D3B9-43E5-A304-D217037876A8</RequestId>
</UpdateAcceleratorConfirmResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "6FEA0CF3-D3B9-43E5-A304-D217037876A8"
}
```

## Error codes

| HTTP status code | Error code             | Error message                                     | Description                                                                  |
|------------------|------------------------|---------------------------------------------------|------------------------------------------------------------------------------|
| 400              | NotExist.Accelerator   | The accelerated instance does not exist.          | The error message returned because the specified GA instance does not exist. |
| 400              | StateError.Accelerator | The state of the accelerated instance is invalid. | The error message returned because the specified GA instance is invalid.     |

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

## 6. Bandwidth plans

### 6.1. BandwidthPackageAddAccelerator

Associates a bandwidth plan with a Global Accelerator (GA) instance.

#### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

#### Request parameters

| Parameter          | Type   | Required | Example                        | Description                                                                                      |
|--------------------|--------|----------|--------------------------------|--------------------------------------------------------------------------------------------------|
| Action             | String | Yes      | BandwidthPackageAddAccelerator | The operation that you want to perform. Set the value to <b>BandwidthPackageAddAccelerator</b> . |
| RegionId           | String | Yes      | cn-hangzhou                    | The ID of the region where the GA instance is deployed. Set the value to <b>cn-hangzhou</b> .    |
| BandwidthPackageId | String | Yes      | gbwp-bp1sgzldyj6b4q7cx****     | The ID of the bandwidth plan that you want to associate with the GA instance.                    |
| AcceleratorId      | String | Yes      | ga-bp1qe94o52ot4pkfn****       | The ID of the GA instance that you want to associate with the bandwidth plan.                    |

#### Response parameters

| Parameter          | Type            | Example                              | Description                                                           |
|--------------------|-----------------|--------------------------------------|-----------------------------------------------------------------------|
| RequestId          | String          | B7770CB9-9745-4FE5-9EDA-D14B01A12A50 | The ID of the request.                                                |
| Accelerators       | Array of String | ga-bp1qe94o52ot4pkfn****             | The ID of the GA instance that is associated with the bandwidth plan. |
| BandwidthPackageId | String          | gbwp-bp1sgzldyj6b4q7cx**             | The ID of the bandwidth plan that is associated with the GA instance. |

#### Examples

Sample requests

```
http(s)://[Endpoint]/?Action=BandwidthPackageAddAccelerator
&RegionId=cn-hangzhou
&BandwidthPackageId=gbwp-bp1sgzldyj6b4q7cx****
&AcceleratorId=ga-bp1qe94o52ot4pkfn****
&<Common request parameters>
```

#### Sample success responses

##### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<BandwidthPackageAddAcceleratorResponse>
  <RequestId>B7770CB9-9745-4FE5-9EDA-D14B01A12A50</RequestId>
  <Accelerators>ga-bp1qe94o52ot4pkfn****</Accelerators>
  <BandwidthPackageId>gbwp-bp1sgzldyj6b4q7cx****</BandwidthPackageId>
</BandwidthPackageAddAcceleratorResponse>
```

##### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "B7770CB9-9745-4FE5-9EDA-D14B01A12A50",
  "Accelerators": [ "ga-bp1qe94o52ot4pkfn****" ],
  "BandwidthPackageId": "gbwp-bp1sgzldyj6b4q7cx****"
}
```

## Error codes

| HTTP status code | Error code                     | Error message                                 | Description                                                                            |
|------------------|--------------------------------|-----------------------------------------------|----------------------------------------------------------------------------------------|
| 400              | NotExist.BandwidthPackage      | The bandwidth package does not exist.         | The error message returned because the specified bandwidth plan does not exist.        |
| 400              | StateError.BandwidthPackage    | The state of bandwidth package is invalid.    | The error message returned because the specified bandwidth plan is invalid.            |
| 400              | NotExist.BasicBandwidthPackage | You must specify the basic bandwidth package. | The error message returned because the required basic bandwidth plan is not specified. |

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

## 6.2. BandwidthPackageRemoveAccelerator

You can call this operation to disassociate a bandwidth plan from a Global Accelerator instance.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

## Request parameters

| Parameter          | Type   | Required | Example                           | Description                                                                                         |
|--------------------|--------|----------|-----------------------------------|-----------------------------------------------------------------------------------------------------|
| Action             | String | Yes      | BandwidthPackageRemoveAccelerator | The operation that you want to perform. Set the value to <b>BandwidthPackageRemoveAccelerator</b> . |
| AcceleratorId      | String | Yes      | ga-bp1qe94o52ot4pkfn****          | The ID of the Global Accelerator instance from which you want to disassociate the bandwidth plan.   |
| BandwidthPackageId | String | Yes      | gbwp-bp1sgzldyj6b4q7cx****        | The ID of the bandwidth plan to disassociate.                                                       |
| RegionId           | String | Yes      | cn-hangzhou                       | The region ID of the Global Accelerator instance. Set the value to <b>cn-hangzhou</b> .             |

## Response parameters

| Parameter          | Type   | Example                              | Description                                                                                    |
|--------------------|--------|--------------------------------------|------------------------------------------------------------------------------------------------|
| BandwidthPackageId | String | gbwp-bp1sgzldyj6b4q7cx****           | The ID of the bandwidth plan that has been disassociated from the Global Accelerator instance. |
| RequestId          | String | B7770CB9-9745-4FE5-9EDA-D14B01A12A50 | The ID of the request.                                                                         |
| Accelerators       | List   | ga-bp1qe94o52ot4pkfn****             | The ID of the Global Accelerator instance.                                                     |

## Examples

### Sample requests

```
http(s)://[Endpoint]/? Action=BandwidthPackageRemoveAccelerator
&AcceleratorId=ga-bp1qe94o52ot4pkfn****
&BandwidthPackageId=gbwp-bp1sgzldyj6b4q7cx****
&RegionId=cn-hangzhou
&<Common request parameters>
```

## Sample success responses

## XML format

```
<BandwidthPackageRemoveAcceleratorResponse>
  <BandwidthPackageId>gbwp-bp1sgzldyj6b4q7cx****</BandwidthPackageId>
  <RequestId>B7770CB9-9745-4FE5-9EDA-D14B01A12A50</RequestId>
  <Accelerators>ga-bp1qe94o52ot4pkfn****</Accelerators>
</BandwidthPackageRemoveAcceleratorResponse>
```

## JSON format

```
{
  "BandwidthPackageId": "gbwp-bp1sgzldyj6b4q7cx****",
  "RequestId": "B7770CB9-9745-4FE5-9EDA-D14B01A12A50",
  "Accelerators": [
    "ga-bp1qe94o52ot4pkfn****"
  ]
}
```

## Error codes

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

## 6.3. DescribeBandwidthPackage

Queries the information about a specified bandwidth plan.

## Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

## Request parameter

| Parameter          | Type   | Required | Example                    | Description                                                                                  |
|--------------------|--------|----------|----------------------------|----------------------------------------------------------------------------------------------|
| Action             | String | Yes      | DescribeBandwidthPackage   | The operation that you want to perform. Set the value to <b>DescribeBandwidthPackage</b> .   |
| RegionId           | String | Yes      | cn-hangzhou                | The region ID of the Global Accelerator (GA) instance. Set the value to <b>cn-hangzhou</b> . |
| BandwidthPackageId | String | Yes      | gbwp-bp1sgzldyj6b4q7cx**** | The ID of the bandwidth plan that you want to query.                                         |

## Response parameters

| Parameter              | Type            | Example                              | Description                                                                                                                                                                                                                                                                                                 |
|------------------------|-----------------|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CbnGeographicRegionIdB | String          | Global                               | Area B specified in the cross-border acceleration bandwidth plan. Only <b>Global</b> (global) is returned.<br><br>This parameter is returned only for bandwidth plans that are created on the International site (alibabacloud.com).                                                                        |
| CbnGeographicRegionIdA | String          | China-mainland                       | Area A specified in the cross-border acceleration bandwidth plan. Only <b>China-mainland</b> (mainland China) is returned.<br><br>This parameter is returned only for bandwidth plans that are created on the International site (alibabacloud.com).                                                        |
| Description            | String          | testDescription                      | The description of the bandwidth plan.                                                                                                                                                                                                                                                                      |
| RequestId              | String          | 4B6DBBB0-2D01-4C6A-A384-4129266E6B78 | The ID of the request.                                                                                                                                                                                                                                                                                      |
| CreateTime             | String          | 1578966918000                        | The timestamp that indicates when the bandwidth plan was created.                                                                                                                                                                                                                                           |
| Name                   | String          | testName                             | The name of the bandwidth plan.                                                                                                                                                                                                                                                                             |
| BandwidthType          | String          | Basic                                | The type of the bandwidth. Valid values: <ul style="list-style-type: none"> <li><b>Basic</b>: basic bandwidth</li> <li><b>Enhanced</b>: enhanced bandwidth</li> <li><b>Advanced</b>: premium bandwidth</li> </ul>                                                                                           |
| Type                   | String          | Basic                                | The type of the bandwidth plan. Valid values: <ul style="list-style-type: none"> <li><b>Basic</b>: basic bandwidth plan</li> <li><b>CrossDomain</b>: cross-border acceleration bandwidth plan</li> </ul> Only <b>Basic</b> is returned for bandwidth plans that are created on the China site (aliyun.com). |
| Accelerators           | Array of String | ga-bp1qe94o52ot4pkfn****             | The ID of the GA instance that is associated with the bandwidth plan.                                                                                                                                                                                                                                       |

| Parameter          | Type    | Example                  | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------|---------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| State              | String  | active                   | <p>The status of the bandwidth plan. Valid values:</p> <ul style="list-style-type: none"> <li><b>init</b>: The bandwidth plan is being initialized.</li> <li><b>active</b>: The bandwidth plan is available.</li> <li><b>binded</b>: The bandwidth plan is associated with a GA instance.</li> <li><b>binding</b>: The bandwidth plan is being associated with a GA instance.</li> <li><b>unbinding</b>: The bandwidth plan is being disassociated from a GA instance.</li> <li><b>updating</b>: The bandwidth plan is being updated.</li> <li><b>financialLocked</b>: The bandwidth plan is locked due to overdue payments.</li> </ul> |
| ChargeType         | String  | PREPAY                   | <p>The billing method of the bandwidth plan. Only <b>PREPAY</b> is returned, which indicates the subscription billing method.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Bandwidth          | Integer | 2                        | <p>The bandwidth limit of the bandwidth plan. Unit: Mbit/s.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| ExpiredTime        | String  | 1578966918000            | <p>The timestamp that indicates when the bandwidth plan expires.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| BandwidthPackageld | String  | gbwp-bp1sgzldyj6b4q7cx** | <p>The ID of the bandwidth plan.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| RegionId           | String  | cn-hangzhou              | <p>The region ID of the GA instance. Only <b>cn-hangzhou</b> is returned.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| BillingType        | String  | PayByTraffic             | <p>The metering method that is used when you use the pay-as-you-go billing method. Valid values:</p> <ul style="list-style-type: none"> <li><b>PayByTraffic</b>: pay-by-data-transfer</li> <li><b>PayBY95</b>: pay-by-95th-percentile-bandwidth</li> </ul>                                                                                                                                                                                                                                                                                                                                                                              |

| Parameter | Type    | Example | Description                                                                                                                                             |
|-----------|---------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ratio     | Integer | 30      | The percentage of minimum bandwidth guaranteed if the pay-by-95th-percentile-bandwidth metering method is used. Valid values: <b>30</b> to <b>100</b> . |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=DescribeBandwidthPackage
&RegionId=cn-hangzhou
&BandwidthPackageId=gbwp-bp1sgzldyj6b4q7cx****
&<Common request parameters>
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<DescribeBandwidthPackageResponse>
  <CbnGeographicRegionIdB>Global</CbnGeographicRegionIdB>
  <CbnGeographicRegionIdA>China-mainland</CbnGeographicRegionIdA>
  <Description>testDescription</Description>
  <RequestId>4B6DBBB0-2D01-4C6A-A384-4129266E6B78</RequestId>
  <CreateTime>1578966918000</CreateTime>
  <Name>testName</Name>
  <BandwidthType>Basic</BandwidthType>
  <Type>Basic</Type>
  <Accelerators>ga-bp1qe94o52ot4pkfn****</Accelerators>
  <State>active</State>
  <ChargeType>PREPAY</ChargeType>
  <Bandwidth>2</Bandwidth>
  <ExpiredTime>1578966918000</ExpiredTime>
  <BandwidthPackageId>gbwp-bp1sgzldyj6b4q7cx****</BandwidthPackageId>
  <RegionId>cn-hangzhou</RegionId>
  <BillingType>PayByTraffic</BillingType>
  <Ratio>30</Ratio>
</DescribeBandwidthPackageResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "CbnGeographicRegionIdB": "Global",
  "CbnGeographicRegionIdA": "China-mainland",
  "Description": "testDescription",
  "RequestId": "4B6DBBB0-2D01-4C6A-A384-4129266E6B78",
  "CreateTime": "1578966918000",
  "Name": "testName",
  "BandwidthType": "Basic",
  "Type": "Basic",
  "Accelerators": [ "ga-bp1qe94o52ot4pkfn*****" ],
  "State": "active",
  "ChargeType": "PREPAY",
  "Bandwidth": 2,
  "ExpiredTime": "1578966918000",
  "BandwidthPackageId": "gbwp-bp1sgzldyj6b4q7cx*****",
  "RegionId": "cn-hangzhou",
  "BillingType": "PayByTraffic",
  "Ratio": 30
}
```

## Error codes

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

# 6.4. ListBandwidthPackages

Queries bandwidth plans.

## Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

## Request parameters

| Parameter  | Type    | Required | Example                   | Description                                                                                  |
|------------|---------|----------|---------------------------|----------------------------------------------------------------------------------------------|
| Action     | String  | Yes      | ListBandwidthPac<br>kages | The operation that you want to perform. Set the value to <b>ListBandwidthPackages</b> .      |
| RegionId   | String  | Yes      | cn-hangzhou               | The region ID of the Global Accelerator (GA) instance. Set the value to <b>cn-hangzhou</b> . |
| PageNumber | Integer | No       | 1                         | The number of the page to return. Default value: <b>1</b> .                                  |

| Parameter          | Type    | Required | Example                    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------|---------|----------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PageSize           | Integer | No       | 10                         | The number of entries to return on each page. Maximum value: <b>100</b> . Default value: <b>10</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| State              | String  | No       | active                     | <p>The status of the bandwidth plan. Valid values:</p> <ul style="list-style-type: none"><li>• <b>init</b>: The bandwidth plan is being initialized.</li><li>• <b>active</b>: The bandwidth plan is available.</li><li>• <b>binded</b>: The bandwidth plan is associated with a GA instance.</li><li>• <b>binding</b>: The bandwidth plan is being associated with a GA instance.</li><li>• <b>unbinding</b>: The bandwidth plan is being disassociated from a GA instance.</li><li>• <b>updating</b>: The bandwidth plan is being updated.</li><li>• <b>finacialLocked</b>: The bandwidth plan is locked due to overdue payments.</li></ul> |
| Type               | String  | No       | Basic                      | <p>The type of the bandwidth plan. Valid values:</p> <ul style="list-style-type: none"><li>• <b>Basic</b>: basic bandwidth plan</li><li>• <b>CrossDomain</b>: cross-border acceleration bandwidth plan</li></ul> <p>Only <b>Basic</b> is supported for bandwidth plans created on the China site (aliyun.com) .</p>                                                                                                                                                                                                                                                                                                                          |
| BandwidthPackageId | String  | No       | gbwp-bp1sgzldyj6b4q7cx**** | The ID of the bandwidth plan.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

## Response parameters

| Parameter  | Type    | Example | Description                              |
|------------|---------|---------|------------------------------------------|
| TotalCount | Integer | 10      | The total number of entries returned.    |
| PageSize   | Integer | 10      | The number of entries returned per page. |

| Parameter         | Type                      | Example                              | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------|---------------------------|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RequestId         | String                    | 4B6DBBB0-2D01-4C6A-A384-4129266E6B78 | The ID of the request.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| PageNumber        | Integer                   | 1                                    | The page number of the returned page.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| BandwidthPackages | Array of BandwidthPackage |                                      | The details of the returned bandwidth plans.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Type              | String                    | Basic                                | <p>The type of the bandwidth plan. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>Basic</b>: basic bandwidth plan</li> <li>• <b>CrossDomain</b>: cross-border acceleration bandwidth plan</li> </ul> <p>Only <b>Basic</b> is returned for bandwidth plans created on the China site (aliyun.com).</p>                                                                                                                                                                                                                                                                                                                                 |
| BandwidthType     | String                    | Basic                                | <p>The type of the bandwidth. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>Basic</b>: basic bandwidth</li> <li>• <b>Enhanced</b>: enhanced bandwidth</li> <li>• <b>Advanced</b>: premium bandwidth</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                       |
| State             | String                    | active                               | <p>The status of the bandwidth plan. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>init</b>: The bandwidth plan is being initialized.</li> <li>• <b>active</b>: The bandwidth plan is available.</li> <li>• <b>binded</b>: The bandwidth plan is associated with a GA instance.</li> <li>• <b>binding</b>: The bandwidth plan is being associated with a GA instance.</li> <li>• <b>unbinding</b>: The bandwidth plan is being disassociated from a GA instance.</li> <li>• <b>updating</b>: The bandwidth plan is being updated.</li> <li>• <b>finacialLocked</b>: The bandwidth plan is locked due to overdue payments.</li> </ul> |
| CreateTime        | String                    | 1578966918000                        | The time that indicates when the bandwidth plan was created.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| ChargeType        | String                    | PREPAY                               | <p>The billing method of the bandwidth plan.</p> <p>Only <b>PREPAY</b> is returned, which indicates the subscription billing method.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

| Parameter              | Type            | Example                  | Description                                                                                                                                                                                                                                          |
|------------------------|-----------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RegionId               | String          | cn-hangzhou              | The region ID of the GA instance. Only <b>cn-hangzhou</b> is returned.                                                                                                                                                                               |
| CbnGeographicRegionIdA | String          | China-mainland           | Area A specified in the cross-border acceleration bandwidth plan. Only <b>China-mainland</b> (mainland China) is returned.<br><br>This parameter is returned only for bandwidth plans that are created on the International site (alibabacloud.com). |
| BandwidthPackageId     | String          | gbwp-bp1sgzldyj6b4q7cx** | The ID of the bandwidth plan.                                                                                                                                                                                                                        |
| Bandwidth              | Integer         | 2                        | The bandwidth of the bandwidth plan. Unit: Mbit/s.                                                                                                                                                                                                   |
| Description            | String          | testDescription          | The description of the bandwidth plan.                                                                                                                                                                                                               |
| ExpiredTime            | String          | 1578966918000            | The timestamp that indicates when the bandwidth plan expires.                                                                                                                                                                                        |
| Accelerators           | Array of String | ga-bp1qe94o52ot4pkfn**** | The ID of the GA instance that is associated with the bandwidth plan.                                                                                                                                                                                |
| CbnGeographicRegionIdB | String          | Global                   | Area B specified in the cross-border acceleration bandwidth plan. Only <b>Global</b> (global) is returned.<br><br>This parameter is returned only for bandwidth plans that are created on the International site (alibabacloud.com).                 |
| Name                   | String          | testName                 | The name of the bandwidth plan.                                                                                                                                                                                                                      |
| BillingType            | String          | PayByTraffic             | The metering method. Valid values: <ul style="list-style-type: none"> <li><b>PayByTraffic</b>: pay-by-data-transfer</li> <li><b>PayBY95</b>: pay-by-95th-percentile-bandwidth</li> </ul>                                                             |

| Parameter | Type    | Example | Description                                                                                                                                                 |
|-----------|---------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ratio     | Integer | 30      | The percentage of the minimum bandwidth guaranteed if the pay-by-95th-percentile-bandwidth metering method is used. Valid values: <b>30</b> to <b>100</b> . |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=ListBandwidthPackages
&RegionId=cn-hangzhou
&PageNumber=1
&PageSize=10
&State=active
&Type=Basic
&BandwidthPackageId=gbwp-bp1sgzldyj6b4q7cx****
&<Common request parameters>
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<ListBandwidthPackagesResponse>
  <TotalCount>10</TotalCount>
  <PageSize>10</PageSize>
  <RequestId>4B6DBBB0-2D01-4C6A-A384-4129266E6B78</RequestId>
  <PageNumber>1</PageNumber>
  <BandwidthPackages>
    <Type>Basic</Type>
    <BandwidthType>Basic</BandwidthType>
    <State>active</State>
    <CreateTime>1578966918000</CreateTime>
    <ChargeType>PREPAY</ChargeType>
    <RegionId>cn-hangzhou</RegionId>
    <CbnGeographicRegionIdA>China-mainland</CbnGeographicRegionIdA>
    <BandwidthPackageId>gbwp-bp1sgzldyj6b4q7cx****</BandwidthPackageId>
    <Bandwidth>2</Bandwidth>
    <Description>testDescription</Description>
    <ExpiredTime>1578966918000</ExpiredTime>
    <Accelerators>ga-bp1qe94o52ot4pkfn****</Accelerators>
    <CbnGeographicRegionIdB>Global</CbnGeographicRegionIdB>
    <Name>testName</Name>
    <BillingType>PayByTraffic</BillingType>
    <Ratio>30</Ratio>
  </BandwidthPackages>
</ListBandwidthPackagesResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "TotalCount": 10,
  "PageSize": 10,
  "RequestId": "4B6DBBB0-2D01-4C6A-A384-4129266E6B78",
  "PageNumber": 1,
  "BandwidthPackages": [{
    "Type": "Basic",
    "BandwidthType": "Basic",
    "State": "active",
    "CreateTime": "1578966918000",
    "ChargeType": "PREPAY",
    "RegionId": "cn-hangzhou",
    "CbnGeographicRegionIdA": "China-mainland",
    "BandwidthPackageId": "gbwp-bp1sgzldyj6b4q7cx****",
    "Bandwidth": 2,
    "Description": "testDescription",
    "ExpiredTime": "1578966918000",
    "Accelerators": [ "ga-bp1qe94o52ot4pkfn****" ],
    "CbnGeographicRegionIdB": "Global",
    "Name": "testName",
    "BillingType": "PayByTraffic",
    "Ratio": 30
  }]
}
```

## Error codes

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

## 6.5. UpdateBandwidthPackage

Modifies a bandwidth plan.

### Debugging

Alibaba Cloud provides OpenAPI Explorer to simplify API usage. OpenAPI Explorer automatically calculates signature values. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

### Request parameters

| Parameter | Type   | Required | Example                | Description                                                                                                         |
|-----------|--------|----------|------------------------|---------------------------------------------------------------------------------------------------------------------|
| Action    | String | Yes      | UpdateBandwidthPackage | The operation that you want to perform. Set the value to <b>UpdateBandwidthPackage</b> .                            |
| RegionId  | String | Yes      | cn-hangzhou            | The ID of the region where your Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> . |

| Parameter          | Type    | Required | Example                    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------|---------|----------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BandwidthPackageId | String  | Yes      | gbwp-bp1sgzldyj6b4q7cx**** | The ID of the bandwidth plan that you want to upgrade.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Name               | String  | No       | testName                   | The new name of the bandwidth plan.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Description        | String  | No       | testDescription            | The new description of the bandwidth plan.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Bandwidth          | Integer | No       | 2                          | The new bandwidth that is provided by the bandwidth plan.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| BandwidthType      | String  | No       | Basic                      | <p>The new type of bandwidth that is provided by the bandwidth plan. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>Basic</b>: the basic bandwidth</li> <li>• <b>Enhanced</b>: the enhanced bandwidth</li> <li>• <b>Advanced</b>: the advanced bandwidth</li> </ul> <div>  <b>Note</b> You can only upgrade <b>Basic</b> bandwidth to <b>Enhanced</b> bandwidth. You cannot change <b>Enhanced</b> bandwidth or <b>Advanced</b> bandwidth to another type. </div> |
| AutoPay            | Boolean | No       | true                       | <p>Specifies whether to automatically pay the bill. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>false</b>: The system does not automatically pay the bill. This is the default value. After an order is generated, you must go to the Orders page of your Alibaba Cloud account to complete the payment.</li> <li>• <b>true</b>: The system automatically pays the bill. After an order is generated, the system automatically pays the bill.</li> </ul>                                                                                           |

| Parameter     | Type    | Required | Example | Description                                                                                                                                                                                                                                                                                         |
|---------------|---------|----------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AutoUseCoupon | Boolean | No       | false   | <p>Specifies whether to use coupons. Valid values:</p> <ul style="list-style-type: none"><li><b>true</b>: Coupons can be used to offset the cost of the bandwidth plan.</li><li><b>false</b>: Coupons cannot be used to offset the cost of the bandwidth plan. This is the default value.</li></ul> |

## Response parameters

| Parameter        | Type   | Example                             | Description                            |
|------------------|--------|-------------------------------------|----------------------------------------|
| BandwidthPackage | String | gbwp-bp1eo4f57z1kbbcmn****          | The ID of the bandwidth plan.          |
| Description      | String | testDescription                     | The description of the bandwidth plan. |
| RequestId        | String | 1DF3A3CB-B621-44F8-9870-C20D034D7AB | The ID of the request.                 |
| Name             | String | testName                            | The name of the bandwidth plan.        |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=UpdateBandwidthPackage
&RegionId=cn-hangzhou
&BandwidthPackageId=gbwp-bp1sgzldyj6b4q7cx****
&Name=testName
&Description=testDescription
&Bandwidth=2
&BandwidthType=Basic
&AutoPay=true
&AutoUseCoupon=false
&<Common request parameters>
```

### Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<UpdateBandwidthPackageResponse>
  <BandwidthPackage>gbwp-bp1eo4f57z1kbbcmn****</BandwidthPackage>
  <Description>testDescription</Description>
  <RequestId>1DF3A3CB-B621-44F8-9870-C20D034D7AB</RequestId>
  <Name>testName</Name>
</UpdateBandwidthPackageResponse>
```

**JSON format**

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "BandwidthPackage": "gbwp-bp1eo4f57z1kbbcmn****",
  "Description": "testDescription",
  "RequestId": "1DF3A3CB-B621-44F8-9870-C20D034D7AB",
  "Name": "testName"
}
```

## Error codes

| HTTP status code | Error code                    | Error message                                                                         | Description                                                                                                                                                                                                                         |
|------------------|-------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 400              | StateError.BandwidthPackage   | The state of bandwidth package is invalid.                                            | The error message returned because the specified bandwidth plan is in an invalid status.                                                                                                                                            |
| 400              | NotExist.BandwidthPackage     | The bandwidth package does not exist.                                                 | The error message returned because the specified bandwidth plan does not exist.                                                                                                                                                     |
| 400              | UpgradeError.BandwidthPackage | The bandwidth package configurations should be either all upgrades or all downgrades. | The error message returned because some configurations of the specified bandwidth plan are upgraded, but some other configurations are downgraded. The configurations of the bandwidth plan must be all upgraded or all downgraded. |

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

## 6.6. ReplaceBandwidthPackage

Replaces a bandwidth plan with a required one. The replaced bandwidth plan has been associated with a Global Accelerator (GA) instance.

### Description

When you call this operation to replace the bandwidth plan, the GA instance continues to forward network traffic.

## Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

## Request parameters

| Parameter                | Type   | Required | Example                        | Description                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------|--------|----------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action                   | String | Yes      | ReplaceBandwidthPackage        | The operation that you want to perform. Set the value to <b>ReplaceBandwidthPackage</b> .                                                                                                                                                                                                                                                                                                                                                    |
| BandwidthPackageId       | String | Yes      | gbwp-bp176neb61yhcy<br>mow**** | The ID of the required bandwidth plan. When you specify a bandwidth plan, note the following limits: <ul style="list-style-type: none"><li>Only the bandwidth plan that is not associated with a GA instance can be specified.</li><li>If you replace a basic bandwidth plan, make sure that the bandwidth provided by the required plan is not less than the total bandwidth that is assigned to the specified acceleration area.</li></ul> |
| RegionId                 | String | Yes      | cn-hangzhou                    | The region ID of the GA instance. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                                                                                                                                                                                                                      |
| TargetBandwidthPackageId | String | Yes      | gbwp-o978hgeb61yhcy<br>mow**** | The ID of the bandwidth plan that you want to replace.                                                                                                                                                                                                                                                                                                                                                                                       |

## Response parameters

| Parameter | Type   | Example                                      | Description            |
|-----------|--------|----------------------------------------------|------------------------|
| RequestId | String | A0EA8CCA-F081-<br>4338-9790-<br>A1C791CCA779 | The ID of the request. |

## Examples

### Sample requests

```
http(s)://[Endpoint]/? Action=ReplaceBandwidthPackage
&BandwidthPackageId=gbwp-bp176neb61yhcy  
mow****
&RegionId=cn-hangzhou
&TargetBandwidthPackageId=gbwp-o978hgeb61yhcy  
mow****
&<Common request parameters>
```

## Sample success responses

## XML format

```
<ReplaceBandwidthPackageResponse>
  <RequestId>A0EA8CCA-F081-4338-9790-A1C791CCA779</RequestId>
</ReplaceBandwidthPackageResponse>
```

## JSON format

```
{
  "RequestId": "A0EA8CCA-F081-4338-9790-A1C791CCA779"
}
```

## Error codes

| HTTP status code | Error code                     | Error message                                 | Description                                                                            |
|------------------|--------------------------------|-----------------------------------------------|----------------------------------------------------------------------------------------|
| 400              | NotExist.BandwidthPackage      | The bandwidth package does not exist.         | The error message returned because the specified bandwidth plan does not exist.        |
| 400              | StateError.BandwidthPackage    | The state of bandwidth package is invalid.    | The error message returned because the specified bandwidth plan status is invalid.     |
| 400              | NotExist.BasicBandwidthPackage | You must specify the basic bandwidth package. | The error message returned because the required basic bandwidth plan is not specified. |

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

## 6.7. DeleteBandwidthPackage

Deletes a bandwidth plan.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates a sample code of the operation for different SDKs.

### Request parameters

| Parameter | Type   | Required | Example                | Description                                                                              |
|-----------|--------|----------|------------------------|------------------------------------------------------------------------------------------|
| Action    | String | Yes      | DeleteBandwidthPackage | The operation that you want to perform. Set the value to <b>DeleteBandwidthPackage</b> . |

| Parameter          | Type   | Required | Example                              | Description                                                                                                                                                                                                                                                                                |
|--------------------|--------|----------|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RegionId           | String | Yes      | cn-hangzhou                          | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                         |
| BandwidthPackageId | String | Yes      | gbwp-bp1sgzldyj6b4q7cx****           | The ID of the bandwidth plan that you want to delete.                                                                                                                                                                                                                                      |
| ClientToken        | String | No       | 123e4567-e89b-12d3-a456-426655440000 | <p>The client token that is used to ensure the idempotence of the request.</p> <p>You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length.</p> |

## Response parameters

| Parameter          | Type   | Example                              | Description                           |
|--------------------|--------|--------------------------------------|---------------------------------------|
| RequestId          | String | 6FEA0CF3-D3B9-43E5-A304-D217037876A8 | The ID of the request.                |
| BandwidthPackageId | String | gbwp-bp1sgzldyj6b4q7cx**             | The ID of the deleted bandwidth plan. |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=DeleteBandwidthPackage
&RegionId=cn-hangzhou
&BandwidthPackageId=gbwp-bp1sgzldyj6b4q7cx****
&ClientToken=123e4567-e89b-12d3-a456-426655440000
&<Common request parameters>
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<DeleteBandwidthPackageResponse>
  <RequestId>6FEA0CF3-D3B9-43E5-A304-D217037876A8</RequestId>
  <BandwidthPackageId>gbwp-bp1sgzldyj6b4q7cx****</BandwidthPackageId>
</DeleteBandwidthPackageResponse>
```

## JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "6FEA0CF3-D3B9-43E5-A304-D217037876A8",
  "BandwidthPackageId": "gbwp-bp1sgzldyj6b4q7cx*****"
}
```

## Error codes

| HttpCode | Error code                  | Error message                              | Description                                                                                |
|----------|-----------------------------|--------------------------------------------|--------------------------------------------------------------------------------------------|
| 400      | NotExist.BandwidthPackage   | The bandwidth package does not exist.      | The error message returned because the specified bandwidth plan does not exist.            |
| 400      | StateError.BandwidthPackage | The state of bandwidth package is invalid. | The error message returned because the specified bandwidth plan is invalid.                |
| 400      | BindExist.BandwidthPackage  | The bandwidth package is already bound.    | The error message returned because the specified bandwidth plan is bound to a GA instance. |

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

## 6.8. CreateBandwidthPackage

Creates a bandwidth plan.

### Notes

To use Global Accelerator (GA) for acceleration, you must purchase a basic bandwidth plan. A basic bandwidth plan supports the following bandwidth types:

- **Basic:** Both the default acceleration region and default service region are in mainland China. The accelerated service is deployed on Alibaba Cloud.
- **Enhanced:** Both the default acceleration region and default service region are in mainland China. The accelerated service can be deployed on and off Alibaba Cloud.
- **Premium:** Both the default acceleration region and default service region are in mainland China. The accelerated service can be deployed on and off Alibaba Cloud. If you want to accelerate access from clients in mainland China, you must select China (Hong Kong) as the acceleration region.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

### Request parameters

| Parameter    | Type    | Required | Example                | Description                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|---------|----------|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action       | String  | Yes      | CreateBandwidthPackage | The operation that you want to perform. Set the value to <b>CreateBandwidthPackage</b> .                                                                                                                                                                                                                                                                                                                                     |
| RegionId     | String  | Yes      | cn-hangzhou            | The ID of the region where the GA instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                                                                                                                                                                                |
| Bandwidth    | Integer | Yes      | 2                      | The bandwidth value of the bandwidth plan. Unit: Mbit/s.                                                                                                                                                                                                                                                                                                                                                                     |
| Duration     | String  | No       | 1                      | <p>The subscription duration.</p> <ul style="list-style-type: none"> <li>If the <b>PricingCycle</b> parameter is set to <b>Month</b>, valid values for the <b>Duration</b> parameter are 1 to 9.</li> <li>If the <b>PricingCycle</b> parameter is set to <b>Year</b>, valid values for the <b>Duration</b> parameter are 1 to 3.</li> </ul> <p>If <b>ChargeType</b> is set to <b>PREPAY</b>, this parameter is required.</p> |
| PricingCycle | String  | No       | Month                  | <p>The billing cycle. Valid values:</p> <ul style="list-style-type: none"> <li><b>Month</b>: billed on a monthly basis.</li> <li><b>Year</b>: billed on an annual basis.</li> </ul> <p>If <b>ChargeType</b> is set to <b>PREPAY</b>, this parameter is required.</p>                                                                                                                                                         |
| AutoPay      | Boolean | No       | false                  | <p>Specifies whether to enable automatic payment. Valid values:</p> <ul style="list-style-type: none"> <li><b>false</b>: disables automatic payment. If you select this option, you must go to the Order Center to complete the payment after an order is generated.</li> <li><b>true</b>: enables automatic payment. Payments are automatically made.</li> </ul>                                                            |

| Parameter     | Type    | Required | Example      | Description                                                                                                                                                                                                                                                                                                                                                                               |
|---------------|---------|----------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ClientToken   | String  | No       | 123e4567**** | <p>The client token that is used to ensure the idempotence of the request.</p> <p>You can use the client to generate the value, but you must make sure that it is unique among different requests. ClientToken can contain only ASCII characters and cannot exceed 64 characters in length.</p>                                                                                           |
| Type          | String  | Yes      | Basic        | <p>The type of the bandwidth plan. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>Basic</b>: a basic bandwidth plan</li> <li>• <b>CrossDomain</b>: a bandwidth plan for cross-border acceleration</li> </ul> <p>If you call this operation on Alibaba Cloud China Site, only <b>Basic</b> is returned.</p>                                                                 |
| BandwidthType | String  | No       | Basic        | <p>The type of the bandwidth. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>Basic</b>: basic</li> <li>• <b>Enhanced</b>: enhanced</li> <li>• <b>Advanced</b>: premium</li> </ul> <p>If <b>Type</b> is set to <b>Basic</b>, this parameter is required.</p>                                                                                                                |
| AutoUseCoupon | String  | No       | true         | <p>Specifies whether to use coupons for automatic payment. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>true</b>: yes</li> <li>• <b>false</b> (default): no</li> </ul> <div>  <b>Note</b> This parameter is required only when <b>AutoPay</b> is set to <b>true</b>.         </div> |
| Ratio         | Integer | No       | 30           | <p>The minimum percentage for the pay-by-95th-percentile metering method. Valid values: <b>30</b> to <b>100</b>.</p>                                                                                                                                                                                                                                                                      |

| Parameter              | Type   | Required | Example        | Description                                                                                                                                                                                                                                         |
|------------------------|--------|----------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BillingType            | String | No       | PayByTraffic   | The metering method that is used when you use the pay-as-you-go billing method. Valid values: <ul style="list-style-type: none"> <li><b>PayByTraffic</b> (default): pay-by-data-transfer</li> <li><b>PayBY95</b>: pay-by-95th-percentile</li> </ul> |
| ChargeType             | String | No       | PREPAY         | The billing method. Valid values: <ul style="list-style-type: none"> <li><b>PREPAY</b> (default): subscription</li> <li><b>POSTPAY</b>: pay-as-you-go</li> </ul>                                                                                    |
| CbnGeographicRegionIdA | String | No       | China-mainland | Area A to be connected. Set the value to <b>China-mainland</b> .<br>You can set this parameter only if you call this operation on Alibaba Cloud International Site.                                                                                 |
| CbnGeographicRegionIdB | String | No       | Global         | Area B to be connected. Set the value to <b>Global</b> .<br>You can set this parameter only if you call this operation on Alibaba Cloud International Site.                                                                                         |

## Response parameters

| Parameter          | Type   | Example                              | Description                                                                                                   |
|--------------------|--------|--------------------------------------|---------------------------------------------------------------------------------------------------------------|
| RequestId          | String | 4B6DBBB0-2D01-4C6A-A384-4129266E6B78 | The ID of the request.                                                                                        |
| BandwidthPackageId | String | gbwp-bp1sgzldyj6b4q7cx**             | The ID of the bandwidth plan.                                                                                 |
| OrderId            | String | 208257****                           | The ID of the order.<br>If bills are not automatically paid, go to the Order Center to complete the payments. |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=CreateBandwidthPackage
&RegionId=cn-hangzhou
&Bandwidth=2
&Duration=1
&PricingCycle=Month
&AutoPay=false
&ClientToken=123e4567****
&Type=Basic
&BandwidthType=Basic
&AutoUseCoupon=true
&Ratio=30
&BillingType=PayByTraffic
&ChargeType=PREPAY
&CbnGeographicRegionIdA=China-mainland
&CbnGeographicRegionIdB=Global
&Common request parameters
```

#### Sample success responses

##### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<CreateBandwidthPackageResponse>
  <RequestId>4B6DBBB0-2D01-4C6A-A384-4129266E6B78</RequestId>
  <BandwidthPackageId>gbwp-bp1sgzldyj6b4q7cx****</BandwidthPackageId>
  <OrderId>208257****</OrderId>
</CreateBandwidthPackageResponse>
```

##### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "4B6DBBB0-2D01-4C6A-A384-4129266E6B78",
  "BandwidthPackageId": "gbwp-bp1sgzldyj6b4q7cx****",
  "OrderId": "208257****"
}
```

## Error codes

| HttpCode | Error code                     | Error message                   | Description                                                  |
|----------|--------------------------------|---------------------------------|--------------------------------------------------------------|
| 400      | MissingParameter.BandwidthType | You must specify BandwidthType. | The error message returned because BandwidthType is not set. |

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

## 6.9. ListBandwidthpackages

Queries bandwidth plans.

## Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

## Request parameter

| Parameter  | Type    | Required | Example               | Description                                                                                  |
|------------|---------|----------|-----------------------|----------------------------------------------------------------------------------------------|
| Action     | String  | Yes      | ListBandwidthpackages | The operation that you want to perform. Set the value to <b>ListBandwidthpackages</b> .      |
| RegionId   | String  | Yes      | cn-hangzhou           | The region ID of the Global Accelerator (GA) instance. Set the value to <b>cn-hangzhou</b> . |
| PageNumber | Integer | No       | 1                     | The number of the page to return. Default value: 1.                                          |
| PageSize   | Integer | No       | 10                    | The number of entries to return on each page. Maximum value: 100. Default value: 10.         |

## Response parameters

| Parameter          | Type                      | Example                              | Description                              |
|--------------------|---------------------------|--------------------------------------|------------------------------------------|
| TotalCount         | Integer                   | 10                                   | The total number of entries.             |
| PageSize           | Integer                   | 10                                   | The number of entries returned per page. |
| RequestId          | String                    | 4B6DBBB0-2D01-4C6A-A384-4129266E6B78 | The ID of the request.                   |
| PageNumber         | Integer                   | 1                                    | The page number of the returned page.    |
| BandwidthPackages  | Array of BandwidthPackage |                                      | The details of the bandwidth plans.      |
| BandwidthPackageId | String                    | gbwp-bp1sgzldyj6b4q7cx**             | The ID of the bandwidth plan.            |

| Parameter    | Type            | Example                              | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|-----------------|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bandwidth    | Integer         | 2                                    | The bandwidth limit of the bandwidth plan. Unit: Mbit/s.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Description  | String          | testDescription                      | The description of the bandwidth plan.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| ExpiredTime  | String          | 1578966918000                        | The timestamp that indicates when the bandwidth plan expires.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| State        | String          | active                               | <p>The status of the bandwidth plan. Valid values:</p> <ul style="list-style-type: none"> <li><b>init</b>: The bandwidth plan is being initialized.</li> <li><b>active</b>: The bandwidth plan is available.</li> <li><b>binded</b>: The bandwidth plan is associated with a GA instance.</li> <li><b>binding</b>: The bandwidth plan is being associated with a GA instance.</li> <li><b>unbinding</b>: The bandwidth plan is being disassociated from a GA instance.</li> <li><b>updating</b>: The bandwidth plan is being updated.</li> <li><b>finacialLocked</b>: The bandwidth plan is locked due to overdue payments.</li> </ul> |
| CreateTime   | String          | 1578966918000                        | The timestamp that indicates when the bandwidth plan was created.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| ChargeType   | String          | PREPAY                               | The billing method of the bandwidth plan. Only <b>PREPAY</b> is returned, which indicates the subscription billing method.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Accelerators | Array of String | ga-bp1qe94o52ot4pkfn****             | The ID of the GA instance that is associated with the bandwidth plan.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Name         | String          | Accelerator                          | The name of the GA instance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| RegionId     | String          | DE77A7F3-3B74-41C0-A5BC-CAFD188C28B6 | The ID of the request.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

## Examples

### Sample requests

```

http(s)://[Endpoint]/?Action=ListBandwidthpackages
&RegionId=cn-hangzhou
&PageNumber=1
&PageSize=10
&<Common request parameters>

```

### Sample success responses

#### XML format

```

HTTP/1.1 200 OK
Content-Type:application/xml
<ListBandwidthpackagesResponse>
  <TotalCount>10</TotalCount>
  <PageSize>10</PageSize>
  <RequestId>4B6DBBB0-2D01-4C6A-A384-4129266E6B78</RequestId>
  <PageNumber>1</PageNumber>
  <BandwidthPackages>
    <BandwidthPackageId>gbwp-bp1sgzldyj6b4q7cx****</BandwidthPackageId>
    <Bandwidth>2</Bandwidth>
    <Description>testDescription</Description>
    <ExpiredTime>1578966918000</ExpiredTime>
    <State>active</State>
    <CreateTime>1578966918000</CreateTime>
    <ChargeType>PREPAY</ChargeType>
    <Accelerators>ga-bp1qe94o52ot4pkfn****</Accelerators>
    <Name>Accelerator</Name>
    <RegionId>DE77A7F3-3B74-41C0-A5BC-CAFD188C28B6</RegionId>
  </BandwidthPackages>
</ListBandwidthpackagesResponse>

```

#### JSON format

```

HTTP/1.1 200 OK
Content-Type:application/json
{
  "TotalCount": 10,
  "PageSize": 10,
  "RequestId": "4B6DBBB0-2D01-4C6A-A384-4129266E6B78",
  "PageNumber": 1,
  "BandwidthPackages": [ {
    "BandwidthPackageId": "gbwp-bp1sgzldyj6b4q7cx****",
    "Bandwidth": 2,
    "Description": "testDescription",
    "ExpiredTime": "1578966918000",
    "State": "active",
    "CreateTime": "1578966918000",
    "ChargeType": "PREPAY",
    "Accelerators": [ "ga-bp1qe94o52ot4pkfn****" ],
    "Name": "Accelerator",
    "RegionId": "DE77A7F3-3B74-41C0-A5BC-CAFD188C28B6"
  } ]
}

```

## Error codes

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

# 7. Acceleration regions

## 7.1. CreateIpSets

Creates one or more acceleration regions.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

### Request parameter

| Parameter                             | Type   | Required | Example                              | Description                                                                                                                                                                                                                                                                     |
|---------------------------------------|--------|----------|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action                                | String | Yes      | CreateIpSets                         | The operation that you want to perform. Set the value to <b>CreateIpSets</b> .                                                                                                                                                                                                  |
| RegionId                              | String | Yes      | cn-hangzhou                          | The region ID of the Global Accelerator (GA) instance. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                                    |
| ClientToken                           | String | No       | 1F4B6A4A-C89E-489E-BAF1-52777EE148EF | The client token that is used to ensure the idempotence of the request. You can use the client to generate the value, but you must make sure that it is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length. |
| AcceleratorId                         | String | Yes      | ga-bp1yeeq8yfoyszmq****              | The ID of the GA instance.                                                                                                                                                                                                                                                      |
| AccelerateRegion.N.AccelerateRegionId | String | Yes      | cn-huhehaote                         | The ID of the acceleration region.                                                                                                                                                                                                                                              |
| AccelerateRegion.N.IpVersion          | String | No       | IPv6                                 | The Internet Protocol (IP) version used to connect to the GA instance. Valid values: <ul style="list-style-type: none"><li><b>IPv4</b> (default): IPv4</li><li><b>IPv6</b>: IPv6</li></ul>                                                                                      |

| Parameter                    | Type    | Required | Example | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------------------|---------|----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AccelerateRegion.N.Bandwidth | Integer | No       | 2       | <p>The bandwidth allocated to the acceleration region. Unit: <b>Mbit/s</b>.</p> <div> <p> <b>Note</b></p> <ul style="list-style-type: none"> <li>Each acceleration region must be allocated a minimum of 2 Mbit/s of bandwidth.</li> <li>The total bandwidth for all acceleration regions cannot exceed the bandwidth limit of your basic bandwidth plan.</li> </ul> </div> |

## Response parameters

| Parameter          | Type             | Example                              | Description                                                               |
|--------------------|------------------|--------------------------------------|---------------------------------------------------------------------------|
| RequestId          | String           | 1F4B6A4A-C89E-489E-BAF1-52777EE148EF | The ID of the request.                                                    |
| IpSets             | Array of GalpSet |                                      | The configurations of the acceleration regions.                           |
| AccelerateRegionId | String           | cn-qingdao                           | The ID of the acceleration region.                                        |
| Bandwidth          | Integer          | 2                                    | The bandwidth allocated to the acceleration region. Unit: <b>Mbit/s</b> . |
| IpSetId            | String           | ips-bp11r5jb8ogp122xl**              | The ID of the acceleration region.                                        |
| AcceleratorId      | String           | ga-bp1yeeq8yfoyszmq***               | The ID of the GA instance.                                                |

## Examples

Sample requests

```
http(s)://[Endpoint]/?Action=CreateIpSets
&RegionId=cn-hangzhou
&ClientToken=1F4B6A4A-C89E-489E-BAF1-52777EE148EF
&AcceleratorId=ga-bp1yeeq8yfoyszmq****
&AccelerateRegion=[{"AccelerateRegionId":"cn-huhehaote","IpVersion":"IPv6","Bandwidth":2}]
&<Common request parameters>
```

#### Sample success responses

##### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<CreateIpSetsResponse>
  <RequestId>1F4B6A4A-C89E-489E-BAF1-52777EE148EF</RequestId>
  <IpSets>
    <AccelerateRegionId>cn-qingdao</AccelerateRegionId>
    <Bandwidth>2</Bandwidth>
    <IpSetId>ips-bp11r5jb8ogp122xl****</IpSetId>
  </IpSets>
  <AcceleratorId>ga-bp1yeeq8yfoyszmq****</AcceleratorId>
</CreateIpSetsResponse>
```

##### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "1F4B6A4A-C89E-489E-BAF1-52777EE148EF",
  "IpSets": [{
    "AccelerateRegionId": "cn-qingdao",
    "Bandwidth": 2,
    "IpSetId": "ips-bp11r5jb8ogp122xl****"
  }],
  "AcceleratorId": "ga-bp1yeeq8yfoyszmq****"
}
```

## Error codes

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

## 7.2. DescribeIpSet

Queries an accelerated region.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

### Request parameters

| Parameter | Type   | Required | Example                   | Description                                                                                                                     |
|-----------|--------|----------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Action    | String | Yes      | DescribeIpSet             | The operation that you want to perform. Set the value to <b>DescribeIpSet</b> .                                                 |
| IpSetId   | String | Yes      | ips-bp11ilwqjdkjeg9r7**** | The ID of the accelerated region.<br>You can call the <a href="#">ListIpSets</a> operation to query IDs of accelerated regions. |
| RegionId  | String | Yes      | cn-hangzhou               | The ID of the region where the GA instance is deployed. Set the value to <b>cn-hangzhou</b> .                                   |

## Response parameters

| Parameter          | Type    | Example                              | Description                                                                                         |
|--------------------|---------|--------------------------------------|-----------------------------------------------------------------------------------------------------|
| AccelerateRegionId | String  | cn-huhehaote                         | The ID of the accelerated region.                                                                   |
| Bandwidth          | Integer | 3                                    | The bandwidth that is allocated to the accelerated region. Unit: Mbit/s.                            |
| IpAddressList      | List    | 39.XX.XX.220                         | The list of accelerated IP addresses in the accelerated region.                                     |
| IpSetId            | String  | ips-bp11ilwqjdkjeg9r7*****           | The ID of the accelerated region.                                                                   |
| IpVersion          | String  | IPv4                                 | The IP version. <ul style="list-style-type: none"><li>• <b>IPv4</b></li><li>• <b>IPv6</b></li></ul> |
| RequestId          | String  | 6D2BFF54-6AF2-4679-88C4-2F2E187F16CB | The ID of the request.                                                                              |

| Parameter | Type   | Example | Description                                                                                                                                                                                                                                                                                                                                                                               |
|-----------|--------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| State     | String | active  | <p>The state of the accelerated region. Valid values:</p> <ul style="list-style-type: none"><li>• <b>init</b>: The accelerated region is being initialized.</li><li>• <b>active</b>: The accelerated region is in the running state.</li><li>• <b>updating</b>: The accelerated region is being configured.</li><li>• <b>Deleting</b>: The accelerated region is being deleted.</li></ul> |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=DescribeIpSet
&IpSetId=ips-bp11ilwqjdkjeg9r7****
&RegionId=cn-hangzhou
&<Common request parameters>
```

### Sample success responses

#### XML format

```
<DescribeIpSetResponse>
  <IpSetId>ips-bp11ilwqjdkjeg9r7****</IpSetId>
  <RequestId>6D2BFF54-6AF2-4679-88C4-2F2E187F16CB</RequestId>
  <IpVersion>IPv4</IpVersion>
  <State>active</State>
  <Bandwidth>2</Bandwidth>
  <IpAddressList>121.XX.XX.180</IpAddressList>
  <AccelerateRegionId>cn-hangzhou</AccelerateRegionId>
</DescribeIpSetResponse>
```

#### JSON format

```
{
  "IpSetId": "ips-bp11ilwqjdkjeg9r7****",
  "RequestId": "6D2BFF54-6AF2-4679-88C4-2F2E187F16CB",
  "IpVersion": "IPv4",
  "State": "active",
  "Bandwidth": 2,
  "IpAddressList": [
    "121.XX.XX.180"
  ],
  "AccelerateRegionId": "cn-hangzhou"
}
```

## Error codes

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

## 7.3. ListIpSets

You can call this operation to query acceleration regions that match the specified conditions.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

### Request parameters

| Parameter     | Type    | Required | Example                  | Description                                                                                      |
|---------------|---------|----------|--------------------------|--------------------------------------------------------------------------------------------------|
| Action        | String  | Yes      | ListIpSets               | The operation that you want to perform. Set the value to <b>ListIpSets</b> .                     |
| AcceleratorId | String  | Yes      | ga-bp1yeeq8yfoyszmqy**** | The ID of the Global Accelerator instance.                                                       |
| PageNumber    | Integer | Yes      | 1                        | The number of the page to return. Pages start from page 1. Default value: <b>1</b> .             |
| RegionId      | String  | Yes      | cn-hangzhou              | The region ID of the Global Accelerator instance. Set the value to <b>cn-hangzhou</b> .          |
| PageSize      | String  | No       | 10                       | The number of entries to return on each page. Valid values: 1 to 100. Default value: <b>10</b> . |

### Response parameters

| Parameter          | Type    | Example      | Description                                                               |
|--------------------|---------|--------------|---------------------------------------------------------------------------|
| IpSets             | Array   |              | The list of the acceleration regions.                                     |
| AccelerateRegionId | String  | cn-huhehaote | The ID of the acceleration region.                                        |
| Bandwidth          | Integer | 2            | The bandwidth allocated to the acceleration region. Unit: <b>Mbit/s</b> . |

| Parameter     | Type    | Example                              | Description                                                                                                                                                                                                                                                                                                                                                                |
|---------------|---------|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IpAddressList | List    | ['39.xx.xx.220']                     | The list of accelerated IP addresses in the acceleration region.                                                                                                                                                                                                                                                                                                           |
| IpSetId       | String  | ips-bp11r5jb8ogp122xl**              | The ID of the acceleration region.                                                                                                                                                                                                                                                                                                                                         |
| State         | String  | active                               | The status of the acceleration region. <ul style="list-style-type: none"><li>• <b>init</b>: The acceleration region is being initialized.</li><li>• <b>active</b>: The acceleration region is in the running state.</li><li>• <b>updating</b>: The acceleration region is being configured.</li><li>• <b>deleting</b>: The acceleration region is being deleted.</li></ul> |
| PageNumber    | Integer | 1                                    | The number of the returned page.                                                                                                                                                                                                                                                                                                                                           |
| PageSize      | Integer | 10                                   | The number of entries returned per page.                                                                                                                                                                                                                                                                                                                                   |
| RequestId     | String  | A9B4E54C-9CCD-4002-91A9-D38C6C209192 | The ID of the request.                                                                                                                                                                                                                                                                                                                                                     |
| TotalCount    | Integer | 2                                    | The total number of entries returned.                                                                                                                                                                                                                                                                                                                                      |

## Examples

### Sample requests

```
http(s)://[Endpoint]/? Action=ListIpSets
&AcceleratorId=ga-bp1yeeq8yfoyszmgy****
&PageNumber=1
&RegionId=cn-hangzhou
&<Common request parameters>
```

### Sample success responses

XML format

```

<ListIpSetsResponse>
  <PageNumber>1</PageNumber>
  <TotalCount>2</TotalCount>
  <PageSize>10</PageSize>
  <RequestId>A9B4E54C-9CCD-4002-91A9-D38C6C209192</RequestId>
  <IpSets>
    <State>active</State>
    <AccelerateRegionId>cn-huhehaote</AccelerateRegionId>
    <IpSetId>ips-bp11r5jb8ogp122xl****</IpSetId>
    <IpAddressList>39.xx.xx.220</IpAddressList>
    <Bandwidth>2</Bandwidth>
  </IpSets>
  <IpSets>
    <State>active</State>
    <AccelerateRegionId>cn-qingdao</AccelerateRegionId>
    <IpSetId>ips-bp11c9mpphtb1xkds****</IpSetId>
    <IpAddressList>47.xx.xx.113</IpAddressList>
    <Bandwidth>3</Bandwidth>
  </IpSets>
</ListIpSetsResponse>

```

#### JSON format

```

{
  "PageNumber": 1,
  "TotalCount": 2,
  "PageSize": 10,
  "RequestId": "A9B4E54C-9CCD-4002-91A9-D38C6C209192",
  "IpSets": [
    {
      "State": "active",
      "AccelerateRegionId": "cn-huhehaote",
      "IpSetId": "ips-bp11r5jb8ogp122xl****",
      "IpAddressList": [
        "39.xx.xx.220"
      ],
      "Bandwidth": 2
    },
    {
      "State": "active",
      "AccelerateRegionId": "cn-qingdao",
      "IpSetId": "ips-bp11c9mpphtb1xkds****",
      "IpAddressList": [
        "47.xx.xx.113"
      ],
      "Bandwidth": 3
    }
  ]
}

```

## Error codes.

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

## 7.4. UpdateIpSet

You can call this operation to modify specified acceleration regions in the acceleration area.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

### Request parameters

| Parameter   | Type    | Required | Example                              | Description                                                                                                                                                                                                              |
|-------------|---------|----------|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action      | String  | Yes      | UpdateIpSet                          | The operation that you want to perform. Set the value to <b>UpdateIpSet</b> .                                                                                                                                            |
| Bandwidth   | Integer | Yes      | 3                                    | The new bandwidth that is allocated to the acceleration region after you perform the operation.                                                                                                                          |
| IpSetId     | String  | Yes      | ips-bp11r5jb8ogp122xl****            | The ID of the acceleration region that you want to modify.                                                                                                                                                               |
| RegionId    | String  | Yes      | cn-hangzhou                          | The ID of the region to which the GA instance belongs. Set the value to <b>cn-hangzhou</b> .                                                                                                                             |
| ClientToken | String  | No       | 7D2F7E4E-B958-439C-9821-56D6213A31EC | The client token that ensures the idempotence of the request. Each client generates a unique token to identify different requests. The token must be 1 to 64 characters in length and can only contain ASCII characters. |

### Response parameters

| Parameter | Type   | Example                              | Description            |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | 7D2F7E4E-B958-439C-9821-56D6213A31EC | The ID of the request. |

### Examples

Sample requests

```
http(s)://[Endpoint]/? Action=UpdateIpSet
&Bandwidth=3
&IpSetId=ips-bp11r5jb8ogp122xl****
&RegionId=cn-hangzhou
&<Common request parameters>
```

Sample success responses

XML format

```
<UpdateIpSetResponse>
  <RequestId>7D2F7E4E-B958-439C-9821-56D6213A31EC</RequestId>
</UpdateIpSetResponse>
```

JSON format

```
{
  "RequestId": "7D2F7E4E-B958-439C-9821-56D6213A31EC"
}
```

## Error codes.

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

# 7.5. UpdateIpSets

Modifies the attributes of one or more acceleration regions within the acceleration area of a Global Accelerator (GA) instance.

## Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

## Request parameters

| Parameter          | Type    | Required | Example      | Description                                                                                   |
|--------------------|---------|----------|--------------|-----------------------------------------------------------------------------------------------|
| Action             | String  | Yes      | UpdateIpSets | The operation that you want to perform. Set the value to <b>UpdateIpSets</b> .                |
| RegionId           | String  | Yes      | cn-hangzhou  | The ID of the region where the GA instance is deployed. Set the value to <b>cn-hangzhou</b> . |
| IpSets.N.Bandwidth | Integer | Yes      | 4            | The new bandwidth to be allocated to the acceleration region. Unit: Mbit/s.                   |

| Parameter        | Type   | Required | Example                   | Description                                       |
|------------------|--------|----------|---------------------------|---------------------------------------------------|
| IpSets.N.IpSetId | String | Yes      | ips-bp11c9mpphtb1xkds**** | The ID of the acceleration region to be modified. |

## Response parameters

| Parameter | Type   | Example                              | Description            |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | 685662FF-B1CE-4D5C-A4C8-2FF3C2146BFC | The ID of the request. |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=UpdateIpSets
&RegionId=cn-hangzhou
&IpSets=[{"Bandwidth":4,"IpSetId":"ips-bp11c9mpphtb1xkds****"}]
&<Common request parameters>
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<UpdateIpSetsResponse>
  <RequestId>685662FF-B1CE-4D5C-A4C8-2FF3C2146BFC</RequestId>
</UpdateIpSetsResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "685662FF-B1CE-4D5C-A4C8-2FF3C2146BFC"
}
```

## Error codes

| HTTP status code | Error code    | Error message                             | Description                                                                       |
|------------------|---------------|-------------------------------------------|-----------------------------------------------------------------------------------|
| 400              | Repeat.IpSets | The configuration of IpSet is duplicated. | The error message returned because duplicated acceleration regions are specified. |

| HTTP status code | Error code                     | Error message                                                                 | Description                                                                                                                                                                 |
|------------------|--------------------------------|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 400              | NotExist.IpSets                | The IpSet does not exist.                                                     | The error message returned because the specified acceleration region does not exist.                                                                                        |
| 400              | NotActive.IpSet                | The state of IpSet is not active.                                             | The error message returned because the specified acceleration region is in an unstable status.                                                                              |
| 400              | StateError.Accelerator         | The state of the accelerated instance is invalid.                             | The error message returned because the specified GA instance is in an invalid status.                                                                                       |
| 400              | NotExist.BasicBandwidthPackage | You must specify the basic bandwidth package.                                 | The error message returned because the required basic bandwidth plan is not specified.                                                                                      |
| 400              | GreaterThanGa.IpSetBandwidth   | The total bandwidth for IpSet exceeds the total bandwidth of the GA instance. | The error message returned because the total bandwidth allocated to the specified acceleration regions exceeds the total bandwidth that can be provided by the GA instance. |

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

## 7.6. DeleteIpSet

Deletes an acceleration region.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates a sample code of the operation for different SDKs.

### Request parameters

| Parameter | Type   | Required | Example     | Description                                                                                                        |
|-----------|--------|----------|-------------|--------------------------------------------------------------------------------------------------------------------|
| Action    | String | Yes      | DeleteIpSet | The operation that you want to perform. Set the value to <b>DeleteIpSet</b> .                                      |
| RegionId  | String | No       | cn-hangzhou | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> . |

| Parameter     | Type   | Required | Example                              | Description                                                                                                                                                                                                                                                                  |
|---------------|--------|----------|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ClientToken   | String | No       | DD61839A-5CC5-404B-8C6E-56066F0C432D | The client token that is used to ensure the idempotence of the request. You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length. |
| AcceleratorId | String | No       | ga-bp1yeeq8yfoyszmqy****             | The ID of the GA instance.                                                                                                                                                                                                                                                   |
| IpSetId       | String | Yes      | ips-bp11r5jb8ogp122xl****            | The ID of the acceleration region that you want to delete.                                                                                                                                                                                                                   |

## Response parameters

| Parameter | Type   | Example                              | Description            |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | DD61839A-5CC5-404B-8C6E-56066F0C432D | The ID of the request. |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=DeleteIpSet
&RegionId=cn-hangzhou
&ClientToken=DD61839A-5CC5-404B-8C6E-56066F0C432D
&AcceleratorId=ga-bp1yeeq8yfoyszmqy****
&IpSetId=ips-bp11r5jb8ogp122xl****
&<Common request parameters>
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<DeleteIpSetResponse>
  <RequestId>DD61839A-5CC5-404B-8C6E-56066F0C432D</RequestId>
</DeleteIpSetResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "DD61839A-5CC5-404B-8C6E-56066F0C432D"
}
```

## Error codes

| HttpCode | Error code             | Error message                                     | Description                                                                          |
|----------|------------------------|---------------------------------------------------|--------------------------------------------------------------------------------------|
| 400      | NotExist.IpSet         | The IpSet does not exist.                         | The error message returned because the specified acceleration region does not exist. |
| 400      | StateError.IpSet       | The state of IpSet is invalid.                    | The error message returned because the specified acceleration region is invalid      |
| 400      | NotExist.Accelerator   | The accelerated instance does not exist.          | The error message returned because the specified GA instance does not exist.         |
| 400      | StateError.Accelerator | The state of the accelerated instance is invalid. | The error message returned because the specified GA instance is invalid.             |

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

## 7.7. DeletelpSets

You can call this operation to delete one or more acceleration regions.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

### Request parameters

| Parameter  | Type       | Required | Example                  | Description                                                                    |
|------------|------------|----------|--------------------------|--------------------------------------------------------------------------------|
| Action     | String     | Yes      | DeletelpSets             | The operation that you want to perform. Set the value to <b>DeletelpSets</b> . |
| IpSetIds.N | RepeatList | Yes      | ips-bp11c9mphtb1xkds**** | The ID of the acceleration region that you want to delete.                     |

| Parameter | Type   | Required | Example     | Description                                                                                  |
|-----------|--------|----------|-------------|----------------------------------------------------------------------------------------------|
| RegionId  | String | Yes      | cn-hangzhou | The ID of the region to which the GA instance belongs. Set the value to <b>cn-hangzhou</b> . |

## Response parameters

| Parameter | Type   | Example                              | Description            |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | B49B60F6-F6C8-49E5-B06B-E33E3A469A92 | The ID of the request. |

## Examples

### Sample requests

```
http(s)://[Endpoint]/? Action=DeleteIpSets
&IpSetIds.1=ips-bp11c9mpphbt1xkds****
&RegionId=cn-hangzhou
&<Common request parameters>
```

### Sample success responses

#### XML format

```
<DeleteIpSetsResponse>
  <RequestId>B49B60F6-F6C8-49E5-B06B-E33E3A469A92</RequestId>
</DeleteIpSetsResponse>
```

#### JSON format

```
{
  "RequestId": "B49B60F6-F6C8-49E5-B06B-E33E3A469A92"
}
```

## Error codes.

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

# 7.8. ListAvailableAccelerateAreas

Queries available acceleration regions.

## Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates a sample code of the operation for different SDKs.

## Request parameters

| Parameter     | Type   | Required | Example                      | Description                                                                                                        |
|---------------|--------|----------|------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Action        | String | Yes      | ListAvailableAccelerateAreas | The operation that you want to perform. Set the value to <b>ListAvailableAccelerateAreas</b> .                     |
| RegionId      | String | Yes      | cn-hangzhou                  | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> . |
| AcceleratorId | String | Yes      | ga-bp1yeeq8yfoyszmqy****     | The ID of the GA instance.                                                                                         |

## Response parameters

| Parameter  | Type                | Example                              | Description                                 |
|------------|---------------------|--------------------------------------|---------------------------------------------|
| RequestId  | String              | A9B4E54C-9CCD-4002-91A9-D38C6C209192 | The ID of the request.                      |
| Areas      | Array of Areas      |                                      | The information about acceleration areas.   |
| LocalName  | String              | China North                          | The name of the acceleration area.          |
| AreaId     | String              | cn-huabei                            | The ID of the acceleration area.            |
| RegionList | Array of RegionList |                                      | The information about acceleration regions. |
| LocalName  | String              | China (Qingdao)                      | The name of the acceleration region.        |
| RegionId   | String              | cn-qingdao                           | The ID of the acceleration region.          |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=ListAvailableAccelerateAreas
&RegionId=cn-hangzhou
&AcceleratorId=ga-bp1yeeq8yfoyszmqy****
&<Common request parameters>
```

### Sample success responses

**XML** format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<ListAvailableAccelerateAreasResponse>
  <RequestId>A9B4E54C-9CCD-4002-91A9-D38C6C209192</RequestId>
  <Areas>
    <LocalName>China North</LocalName>
    <AreaId>cn-huabei</AreaId>
    <RegionList>
      <LocalName>China (Qingdao)</LocalName>
      <RegionId>cn-qingdao</RegionId>
    </RegionList>
  </Areas>
</ListAvailableAccelerateAreasResponse>
```

**JSON** format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "A9B4E54C-9CCD-4002-91A9-D38C6C209192",
  "Areas": [ {
    "LocalName": "China North",
    "AreaId": "cn-huabei",
    "RegionList": [ {
      "LocalName": "China (Qingdao)",
      "RegionId": "cn-qingdao"
    } ]
  } ]
}
```

## Error codes

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

## 8.Listeners

### 8.1. CreateListener

Creates a listener for a Global Accelerator (GA) instance.

#### Description

A listener listens for connection requests and distributes the requests to endpoints based on forwarding rules that are defined by the scheduling algorithm. This API operation is used to create a listener for a GA instance.

#### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

#### Request parameters

| Parameter     | Type   | Required | Example                              | Description                                                                                                                                                                                                                                                                         |
|---------------|--------|----------|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action        | String | Yes      | CreateListener                       | The operation that you want to perform. Set the value to <b>CreateListener</b> .                                                                                                                                                                                                    |
| RegionId      | String | Yes      | cn-hangzhou                          | The ID of the region where the GA instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                                       |
| ClientToken   | String | No       | 123e4567-e89b-12d3-a456-426655440000 | The client token that is used to ensure the idempotence of the request.<br><br>You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length. |
| AcceleratorId | String | Yes      | ga-bp1odcab8tmno0hdq****             | The ID of the GA instance.                                                                                                                                                                                                                                                          |
| Name          | String | No       | Listener                             | The name of the listener.<br><br>The name must be 2 to 128 characters in length, and can contain letters, digits, underscores (_), and hyphens (-). The name must start with a letter.                                                                                              |

| Parameter           | Type    | Required | Example   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------|---------|----------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description         | String  | No       | Listener  | The description of the listener.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| ClientAffinity      | String  | No       | SOURCE_IP | <p>Specifies whether to enable client affinity for the listener.</p> <ul style="list-style-type: none"> <li>If this parameter is left empty, client affinity is disabled. After client affinity is disabled, requests from a specific client IP address may be forwarded to different endpoints.</li> <li>If this parameter is set to <b>SOURCE_IP</b>, client affinity is enabled. In this case, when a client accesses stateful applications, requests from the same client are forwarded to the same endpoint regardless of the source port or protocol.</li> </ul>                                                                                                                                                                                                                           |
| Protocol            | String  | No       | tcp       | <p>The network transmission protocol that is used by the listener. Valid values:</p> <ul style="list-style-type: none"> <li><b>tcp</b>: TCP</li> <li><b>udp</b>: UDP</li> <li><b>http</b>: HTTP</li> <li><b>https</b>: HTTPS</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| ProxyProtocol       | Boolean | No       | false     | <p>Specifies whether to preserve client IP addresses. Valid values:</p> <ul style="list-style-type: none"> <li><b>true</b>: preserves client IP addresses. After this feature is enabled, backend servers can retrieve client IP addresses.</li> <li><b>false</b> (default): does not preserve client IP addresses.</li> </ul> <div>  <b>Note</b> This parameter will be deprecated from the API operations that are used to configure listeners. We recommend that you set this parameter when you call API operations to configure endpoint groups. For more information about the <b>ProxyProtocol</b> parameter, see <a href="#">CreateEndpointGroup</a> and <a href="#">UpdateEndpointGroup</a>. </div> |
| XForwardedForConfig | Object  | No       |           | The configuration of the <b>XForward</b> field.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

| Parameter                     | Type    | Required | Example | Description                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------|---------|----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| XForwardedForGal<br>dEnabled  | Boolean | No       | false   | <p>Specifies whether to use the <b>GA-ID</b> header to retrieve the ID of the GA instance. Valid values:</p> <ul style="list-style-type: none"> <li><b>true</b>: yes</li> <li><b>false</b> (default): no</li> </ul> <p> <b>Note</b> Only HTTP and HTTPS listeners support this parameter.</p>                               |
| XForwardedForGa<br>ApEnabled  | Boolean | No       | false   | <p>Specifies whether to use the <b>GA-AP</b> header to retrieve the information about the acceleration area. Valid values:</p> <ul style="list-style-type: none"> <li><b>true</b>: yes</li> <li><b>false</b> (default): no</li> </ul> <p> <b>Note</b> Only HTTP and HTTPS listeners support this parameter.</p>             |
| XForwardedForPr<br>otoEnabled | Boolean | No       | false   | <p>Specifies whether to use the <b>GA-X-Forward-Proto</b> header to retrieve the listener protocol of the GA instance. Valid values:</p> <ul style="list-style-type: none"> <li><b>true</b>: yes</li> <li><b>false</b> (default): no</li> </ul> <p> <b>Note</b> Only HTTP and HTTPS listeners support this parameter.</p> |
| XForwardedForPo<br>rtEnabled  | Boolean | No       | false   | <p>Specifies whether to use the <b>GA-X-Forward-Port</b> header to retrieve the listener ports of the GA instance. Valid values:</p> <ul style="list-style-type: none"> <li><b>true</b>: yes</li> <li><b>false</b> (default): no</li> </ul> <p> <b>Note</b> Only HTTP and HTTPS listeners support this parameter.</p>     |

| Parameter      | Type    | Required | Example | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------|---------|----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| XRealIpEnabled | Boolean | No       | false   | <p>Specifies whether to use the <b>X-Real-IP</b> header to retrieve client IP addresses. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>true</b>: yes</li> <li>• <b>false</b> (default): no</li> </ul> <p> <b>Note</b> Only HTTP and HTTPS listeners support this parameter.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                |         |          |         | <p>The ID of the security policy. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>tls_cipher_policy_1_0</b> <ul style="list-style-type: none"> <li>◦ Supported TLS versions: TLS 1.0, TLS 1.1, and TLS 1.2.</li> <li>◦ Supported cipher suites: ECDHE-RSA-AES128-GCM-SHA256, ECDHE-RSA-AES256-GCM-SHA384, ECDHE-RSA-AES128-SHA256, ECDHE-RSA-AES256-SHA384, AES128-GCM-SHA256, AES256-GCM-SHA384, AES128-SHA256, AES256-SHA256, ECDHE-RSA-AES128-SHA, ECDHE-RSA-AES256-SHA, AES128-SHA, AES256-SHA, and DES-CBC3-SHA.</li> </ul> </li> <li>• <b>tls_cipher_policy_1_1</b> <ul style="list-style-type: none"> <li>◦ Supported TLS versions: TLS 1.1 and TLS 1.2.</li> <li>◦ Supported cipher suites: ECDHE-RSA-AES128-GCM-SHA256, ECDHE-RSA-AES256-GCM-SHA384, ECDHE-RSA-AES128-SHA256, ECDHE-RSA-AES256-SHA384, AES128-GCM-SHA256, AES256-GCM-SHA384, AES128-SHA256, AES256-SHA256, ECDHE-RSA-AES128-SHA, ECDHE-RSA-AES256-SHA, AES128-SHA, AES256-SHA, and DES-CBC3-SHA.</li> </ul> </li> <li>• <b>tls_cipher_policy_1_2</b> <ul style="list-style-type: none"> <li>◦ Supported TLS version: TLS 1.2.</li> </ul> </li> </ul> |

| Parameter        | Type   | Required | Example               | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------|--------|----------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SecurityPolicyId | String | No       | tls_cipher_policy_1_0 | <ul style="list-style-type: none"> <li>Supported cipher suites: ECDHE-RSA-AES128-GCM-SHA256, ECDHE-RSA-AES256-GCM-SHA384, ECDHE-RSA-AES128-SHA256, ECDHE-RSA-AES256-SHA384, AES128-GCM-SHA256, AES256-GCM-SHA384, AES128-SHA256, AES256-SHA256, ECDHE-RSA-AES128-SHA, ECDHE-RSA-AES256-SHA, AES128-SHA, AES256-SHA, and DES-CBC3-SHA.</li> <li><b>tls_cipher_policy_1_2_strict</b> <ul style="list-style-type: none"> <li>Supported TLS version: TLS 1.2.</li> <li>Supported cipher suites: ECDHE-RSA-AES128-GCM-SHA256, ECDHE-RSA-AES256-GCM-SHA384, ECDHE-RSA-AES128-SHA256, ECDHE-RSA-AES256-SHA384, ECDHE-RSA-AES128-SHA, and ECDHE-RSA-AES256-SHA.</li> </ul> </li> <li><b>tls_cipher_policy_1_2_strict_with_1_3</b> <ul style="list-style-type: none"> <li>Supported TLS versions: TLS 1.2 and TLS 1.3.</li> <li>Supported cipher suites: TLS_AES_128_GCM_SHA256, TLS_AES_256_GCM_SHA384, TLS_CHACHA20_POLY1305_SHA256, TLS_AES_128_CCM_SHA256, TLS_AES_128_CCM_8_SHA256, ECDHE-ECDSA-AES128-GCM-SHA256, ECDHE-ECDSA-AES256-GCM-SHA384, ECDHE-ECDSA-AES128-SHA256, ECDHE-ECDSA-AES256-SHA384, ECDHE-RSA-AES128-GCM-SHA256, ECDHE-RSA-AES256-GCM-SHA384, ECDHE-RSA-AES128-SHA256, ECDHE-RSA-AES256-SHA384, ECDHE-RSA-AES128-SHA, ECDHE-ECDSA-AES256-SHA, ECDHE-RSA-AES128-SHA, and ECDHE-RSA-AES256-SHA.</li> </ul> </li> </ul> <div>  <b>Note</b> Only HTTPS listeners support this parameter.         </div> |

| Parameter             | Type    | Required | Example             | Description                                                                                                                                                                                                                                                                                                                                       |
|-----------------------|---------|----------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PortRanges.N.FromPort | Integer | Yes      | 20                  | <p>The starting listener port that is used to receive and forward requests to endpoints.</p> <div> <b>Note</b> You can configure only one listener port for an HTTP or HTTPS listener. In this case, the starting and ending listener ports are the same.</div> |
| PortRanges.N.ToPort   | Integer | Yes      | 20                  | <p>The ending listener port that is used to receive and forward requests to endpoints.</p>                                                                                                                                                                                                                                                        |
| Certificates.N.Id     | String  | No       | 449****-cn-hangzhou | <p>The ID of the SSL certificate.</p> <div> <b>Note</b> This parameter is required only when you configure an HTTPS listener.</div>                                                                                                                             |

## Response parameters

| Parameter  | Type   | Example                              | Description             |
|------------|--------|--------------------------------------|-------------------------|
| RequestId  | String | 04F0F334-1335-436C-A1D7-6C044FE73368 | The ID of the request.  |
| ListenerId | String | lsr-bp1bpn0kn908w4nbw****            | The ID of the listener. |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=CreateListener
&RegionId=cn-hangzhou
&ClientToken=123e4567-e89b-12d3-a456-426655440000
&AcceleratorId=ga-bp1odcab8tmno0hdq****
&Name=Listener
&Description=Listener
&ClientAffinity=SOURCE_IP
&Protocol=tcp
&ProxyProtocol=false
&PortRanges=[{"FromPort":20,"ToPort":20}]
&Certificates=[{"Id":"449****-cn-hangzhou"}]
&XForwardedForConfig={"XForwardedForGaldEnabled":false,"XForwardedForGaApEnabled":false,"XForwardedForProtoEnabled":false,"XForwardedForPortEnabled":false,"XRealIpEnabled":false}
&SecurityPolicyId=tls_cipher_policy_1_0
&Common request parameters
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<CreateListenerResponse>
  <RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
  <ListenerId>lrs-bp1bpn0kn908w4nbw****</ListenerId>
</CreateListenerResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368",
  "ListenerId": "lrs-bp1bpn0kn908w4nbw****"
}
```

## Error codes

| HttpCode | Error code               | Error message                                     | Description                                                                           |
|----------|--------------------------|---------------------------------------------------|---------------------------------------------------------------------------------------|
| 400      | Protocallllegal.Listener | The specified listener protocol is invalid.       | The error message returned because the protocol of the specified listener is invalid. |
| 400      | NotExist.Accelerator     | The accelerated instance does not exist.          | The error message returned because the specified GA instance does not exist.          |
| 400      | StateError.Accelerator   | The state of the accelerated instance is invalid. | The error message returned because the specified GA instance is in an invalid state.  |

| HttpCode | Error code                         | Error message                                                                                                                                               | Description                                                                                                                                                                       |
|----------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 400      | QuotaExceeded.Listener             | The maximum number of listeners is exceeded.                                                                                                                | The error message returned because the number of listeners has reached the upper limit.                                                                                           |
| 400      | QuotaExceeded.ListenerPort         | The maximum number of listener ports is exceeded.                                                                                                           | The error message returned because the number of listener ports has reached the upper limit.                                                                                      |
| 400      | PortRangeIllegal.Listener          | The specified listener port range is invalid.                                                                                                               | The error message returned because the specified port range is invalid.                                                                                                           |
| 400      | PortRangeIllegal.Count             | The hugePort listener only supports one port range.                                                                                                         | The error message returned because you can specify only one port range for a listener that supports more than 300 ports.                                                          |
| 400      | PortConflict.Listener              | The listener port configuration is in conflict.                                                                                                             | The error message returned because the specified listener port is already used.                                                                                                   |
| 400      | PortRangeIllegal.ExceededGaAbility | The listener port range is invalid. For each accelerator instance, you can only create a listener with port range over 300 for each protocol (TCP and UDP). | The error message returned because the listener port range is invalid. For each GA instance, you can create only one TCP and one UDP listener with a port range greater than 300. |
| 400      | PortRangeIllegal.UDP               | UDP ports 250, 4789, and 4790 are system reserved ports.                                                                                                    | The error message returned because you cannot specify port 250, port 4789, or port 4790 for UDP listeners. They are reserved by the system.                                       |
| 400      | SystemPort.Listener                | Ports 65500-65535 are system reserved ports.                                                                                                                | The error message returned because ports 65500 to 65535 are reserved by the system.                                                                                               |
| 400      | PortRanges.MustOne                 | The portRanges must be one for HTTPS and HTTP type listener.                                                                                                | The error message returned because an HTTP or HTTPS listener supports only one port.                                                                                              |
| 400      | SecurityPolicyId.NotNeed           | No security policy ID is required for the listener.                                                                                                         | The error message returned because you do not need to configure the security policy ID for the specified listener.                                                                |
| 400      | SecurityPolicyIdIllegal.Listener   | The listener security policy ID %s is illegal.                                                                                                              | The error message returned because the security policy ID of the listener is invalid.                                                                                             |

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

## 8.2. DescribeListener

Queries information about a specified listener of a Global Accelerator (GA) instance.

### Description

This API operation is used to query information about a specified listener of a GA instance. The information includes the status of the listener, the timestamp that indicates when the listener was created, and the listener ports.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

### Request parameters

| Parameter  | Type   | Required | Example                   | Description                                                                                   |
|------------|--------|----------|---------------------------|-----------------------------------------------------------------------------------------------|
| Action     | String | Yes      | DescribeListener          | The operation that you want to perform. Set the value to <b>DescribeListener</b> .            |
| RegionId   | String | Yes      | cn-hangzhou               | The ID of the region where the GA instance is deployed. Set the value to <b>cn-hangzhou</b> . |
| ListenerId | String | Yes      | lsr-bp1bpn0kn908w4nbw**** | The ID of the listener that you want to query.                                                |

### Response parameters

| Parameter   | Type   | Example                              | Description                                                                                                                                                                                                                                                         |
|-------------|--------|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description | String | Listener                             | The description of the listener.                                                                                                                                                                                                                                    |
| RequestId   | String | 6FEA0CF3-D3B9-43E5-A304-D217037876A8 | The ID of the request.                                                                                                                                                                                                                                              |
| State       | String | active                               | The status of the listener. Valid values: <ul style="list-style-type: none"><li><b>active</b>: The listener is running as expected.</li><li><b>creating</b>: The listener is being created.</li><li><b>configuring</b>: The listener is being configured.</li></ul> |

| Parameter    | Type                 | Example             | Description                                                                                                                                                                                                                                                                                                                                        |
|--------------|----------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CreateTime   | String               | 1577786252000       | The timestamp that indicates when the listener was created.                                                                                                                                                                                                                                                                                        |
| PortRanges   | Array of PortRanges  |                     | The information about the listener ports.                                                                                                                                                                                                                                                                                                          |
| FromPort     | Integer              | 20                  | <p>The starting listener port that is used to receive and forward requests to endpoints.</p> <div>  <b>Note</b> You can configure only one listener port for an HTTP or HTTPS listener. In this case, the starting and ending listener ports are the same. </div> |
| ToPort       | Integer              | 20                  | The ending listener port that is used to receive and forward requests to endpoints.                                                                                                                                                                                                                                                                |
| BackendPorts | Array of BackendPort |                     | The information about the backend ports.                                                                                                                                                                                                                                                                                                           |
| FromPort     | String               | 80                  | <p>The starting port that is used by the backend server to receive requests.</p> <p>This parameter is returned only when you configure an HTTPS listener and the listener port is the same port used by the backend server to provide services.</p>                                                                                                |
| ToPort       | String               | 80                  | The ending port that is used by the backend server to receive requests.                                                                                                                                                                                                                                                                            |
| Certificates | Array of Certificate |                     | The SSL certificates.                                                                                                                                                                                                                                                                                                                              |
| Type         | String               | Server              | <p>The type of the certificate.</p> <p>Only <b>Server</b> can be returned, which indicates a server certificate.</p>                                                                                                                                                                                                                               |
| Id           | String               | 449****-cn-hangzhou | The ID of the SSL certificate.                                                                                                                                                                                                                                                                                                                     |

| Parameter      | Type                 | Example                   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------|----------------------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protocol       | String               | TCP                       | The network transmission protocol that is used by the listener. Valid values: <ul style="list-style-type: none"><li>• <b>tcp</b>: TCP</li><li>• <b>udp</b>: UDP</li><li>• <b>http</b>: HTTP</li><li>• <b>https</b>: HTTPS</li></ul>                                                                                                                                                                                                                                                                                                             |
| ListenerId     | String               | lsr-bp1bpn0kn908w4nbw**** | The ID of the listener.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| ClientAffinity | String               | SOURCE_IP                 | Indicates whether client affinity is enabled for the listener. <ul style="list-style-type: none"><li>• If <b>NONE</b> is returned, client affinity is disabled. After client affinity is disabled, requests from a specific client IP address may be forwarded to different endpoints.</li><li>• If <b>SOURCE_IP</b> is returned, client affinity is enabled. In this case, when a client accesses stateful applications, requests from the same client are forwarded to the same endpoint regardless of the source port or protocol.</li></ul> |
| Name           | String               | Listener                  | The name of the listener.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| RelatedAcls    | Array of relatedAcls |                           | The information about the access control list (ACL) that is associated with the listener.                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| AclId          | String               | 123                       | The ID of the ACL that is associated with the listener.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Status         | String               | off                       | Indicates whether the access control feature is enabled. Valid values: <ul style="list-style-type: none"><li>• <b>on</b>: enabled</li><li>• <b>off</b>: disabled</li></ul>                                                                                                                                                                                                                                                                                                                                                                      |

| Parameter           | Type    | Example                  | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------|---------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AclType             | String  | white                    | <p>The type of the ACL. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>white</b>: a whitelist. Only requests from the IP addresses or CIDR blocks in the ACL are forwarded. A whitelist is suitable for scenarios in which you want to allow only specific IP addresses to access an application. Your business may be affected if the whitelist is not set properly. After you configure a whitelist for a listener, only requests from the IP addresses that are added to the whitelist are distributed by the listener. If the whitelist is enabled but no IP addresses are added to the ACL, the listener does not forward requests.</li> <li>• <b>black</b>: a blacklist. All requests from the IP addresses or CIDR blocks in the ACL are blocked. A blacklist is suitable for scenarios in which you want to block access from specific IP addresses or CIDR blocks to an application. If the blacklist is enabled but no IP addresses or CIDR blocks are added to the ACL, the listener forwards all requests.</li> </ul> <p>If the value of <b>Status</b> is <b>on</b>, this parameter is returned.</p> |
| AcceleratorId       | String  | ga-bp1odcab8tmno0hdq**** | The ID of the GA instance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| ProxyProtocol       | Boolean | false                    | <p>Indicates whether client IP addresses are preserved. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>true</b>: client IP addresses are preserved. After this feature is enabled, backend servers can retrieve client IP addresses.</li> <li>• <b>false</b>: client IP addresses are not preserved.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| XForwardedForConfig | Object  |                          | The configuration of the <b>XForward</b> field.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

| Parameter                 | Type    | Example | Description                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------|---------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| XForwardedForGidEnabled   | Boolean | false   | <p>Indicates whether the <b>GA-ID</b> header is used to retrieve the ID of the GA instance. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>true</b>: yes</li> <li>• <b>false</b>: no</li> </ul> <p> <b>Note</b> Only HTTP and HTTPS listeners support this parameter.</p>                               |
| XForwardedForGaApEnabled  | Boolean | false   | <p>Indicates whether the <b>GA-AP</b> header is used to retrieve the information about the acceleration area. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>true</b>: yes</li> <li>• <b>false</b>: no</li> </ul> <p> <b>Note</b> Only HTTP and HTTPS listeners support this parameter.</p>             |
| XForwardedForProtoEnabled | Boolean | false   | <p>Indicates whether the <b>GA-X-Forward-Proto</b> header is used to retrieve the listener protocol of the GA instance. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>true</b>: yes</li> <li>• <b>false</b>: no</li> </ul> <p> <b>Note</b> Only HTTP and HTTPS listeners support this parameter.</p> |
| XForwardedForPortEnabled  | Boolean | false   | <p>Indicates whether the <b>GA-X-Forward-Port</b> header is used to retrieve the listener ports of the GA instance. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>true</b>: yes</li> <li>• <b>false</b>: no</li> </ul> <p> <b>Note</b> Only HTTP and HTTPS listeners support this parameter.</p>     |

| Parameter        | Type    | Example               | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------|---------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| XRealIpEnabled   | Boolean | false                 | <p>Indicates whether the <code>X-Real-IP</code> header is used to retrieve client IP addresses. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>true</b>: yes</li> <li>• <b>false</b>: no</li> </ul> <div>  <b>Note</b> Only HTTP and HTTPS listeners support this parameter.         </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| SecurityPolicyId | String  | tls_cipher_policy_1_0 | <p>The ID of the security policy. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>tls_cipher_policy_1_0</b> <ul style="list-style-type: none"> <li>◦ Supported TLS versions: TLS 1.0, TLS 1.1, and TLS 1.2.</li> <li>◦ Supported cipher suites: ECDHE-RSA-AES128-GCM-SHA256, ECDHE-RSA-AES256-GCM-SHA384, ECDHE-RSA-AES128-SHA256, ECDHE-RSA-AES256-SHA384, AES128-GCM-SHA256, AES256-GCM-SHA384, AES128-SHA256, AES256-SHA256, ECDHE-RSA-AES128-SHA, ECDHE-RSA-AES256-SHA, AES128-SHA, AES256-SHA, and DES-CBC3-SHA.</li> </ul> </li> <li>• <b>tls_cipher_policy_1_1</b> <ul style="list-style-type: none"> <li>◦ Supported TLS versions: TLS 1.1 and TLS 1.2.</li> <li>◦ Supported cipher suites: ECDHE-RSA-AES128-GCM-SHA256, ECDHE-RSA-AES256-GCM-SHA384, ECDHE-RSA-AES128-SHA256, ECDHE-RSA-AES256-SHA384, AES128-GCM-SHA256, AES256-GCM-SHA384, AES128-SHA256, AES256-SHA256, ECDHE-RSA-AES128-SHA, ECDHE-RSA-AES256-SHA, AES128-SHA, AES256-SHA, and DES-CBC3-SHA.</li> </ul> </li> <li>• <b>tls_cipher_policy_1_2</b> <ul style="list-style-type: none"> <li>◦ Supported TLS version: TLS 1.2.</li> <li>◦ Supported cipher suites: ECDHE-RSA-AES128-GCM-SHA256, ECDHE-RSA-AES256-GCM-SHA384, ECDHE-RSA-AES128-SHA256, ECDHE-RSA-AES256-SHA384, AES128-GCM-SHA256, AES256-GCM-SHA384, AES128-SHA256, AES256-SHA256, ECDHE-RSA-AES128-SHA, ECDHE-RSA-AES256-SHA, AES128-SHA, AES256-SHA, and DES-CBC3-SHA.</li> </ul> </li> <li>• <b>tls_cipher_policy_1_2_strict</b></li> </ul> |

| Parameter | Type | Example | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------|------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|           |      |         | <ul style="list-style-type: none"> <li>Supported TLS version: TLS 1.2.</li> <li>Supported cipher suites: ECDHE-RSA-AES128-GCM-SHA256, ECDHE-RSA-AES256-GCM-SHA384, ECDHE-RSA-AES128-SHA256, ECDHE-RSA-AES256-SHA384, ECDHE-RSA-AES128-SHA, and ECDHE-RSA-AES256-SHA.</li> </ul> <ul style="list-style-type: none"> <li><b>tls_cipher_policy_1_2_strict_with_1_3</b> <ul style="list-style-type: none"> <li>Supported TLS versions: TLS 1.2 and TLS 1.3.</li> <li>Supported cipher suites: <ul style="list-style-type: none"> <li>TLS_AES_128_GCM_SHA256,</li> <li>TLS_AES_256_GCM_SHA384,</li> <li>TLS_CHACHA20_POLY1305_SHA256,</li> <li>TLS_AES_128_CCM_SHA256,</li> <li>TLS_AES_128_CCM_8_SHA256, ECDHE-ECDSA-AES128-GCM-SHA256, ECDHE-ECDSA-AES256-GCM-SHA384, ECDHE-ECDSA-AES128-SHA256, ECDHE-ECDSA-AES256-SHA384, ECDHE-RSA-AES128-GCM-SHA256, ECDHE-RSA-AES256-GCM-SHA384, ECDHE-RSA-AES128-SHA256, ECDHE-RSA-AES256-SHA384, ECDHE-ECDSA-AES128-SHA, ECDHE-ECDSA-AES256-SHA, ECDHE-RSA-AES128-SHA, and ECDHE-RSA-AES256-SHA.</li> </ul> </li> </ul> </li> </ul> |

 **Note** Only HTTPS listeners support this parameter.

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=DescribeListener
&RegionId=cn-hangzhou
&ListenerId=lsr-bp1bpn0kn908w4nbw****
&Common request parameters
```

### Sample success responses

XML format

```

HTTP/1.1 200 OK
Content-Type:application/xml
<DescribeListenerResponse>
  <Description>Listener</Description>
  <RequestId>6FEA0CF3-D3B9-43E5-A304-D217037876A8</RequestId>
  <State>active</State>
  <CreateTime>1577786252000</CreateTime>
  <PortRanges>
    <FromPort>20</FromPort>
    <ToPort>20</ToPort>
  </PortRanges>
  <BackendPorts>
    <FromPort>80</FromPort>
    <ToPort>80</ToPort>
  </BackendPorts>
  <Certificates>
    <Type>Server</Type>
    <Id>449****-cn-hangzhou</Id>
  </Certificates>
  <Protocol>TCP</Protocol>
  <ListenerId>lsr-bp1bpn0kn908w4nbw****</ListenerId>
  <ClientAffinity>SOURCE_IP</ClientAffinity>
  <Name>Listener</Name>
  <RelatedAcls>
    <AclId>123</AclId>
    <Status>off</Status>
  </RelatedAcls>
  <AclType>white</AclType>
  <AcceleratorId>ga-bp1odcab8tmno0hdq****</AcceleratorId>
  <ProxyProtocol>false</ProxyProtocol>
  <XForwardedForConfig>
    <XForwardedForGaldEnabled>false</XForwardedForGaldEnabled>
    <XForwardedForGaApEnabled>false</XForwardedForGaApEnabled>
    <XForwardedForProtoEnabled>false</XForwardedForProtoEnabled>
    <XForwardedForPortEnabled>false</XForwardedForPortEnabled>
    <XRealIpEnabled>false</XRealIpEnabled>
  </XForwardedForConfig>
  <SecurityPolicyId>tls_cipher_policy_1_0</SecurityPolicyId>
</DescribeListenerResponse>

```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "Description": "Listener",
  "RequestId": "6FEA0CF3-D3B9-43E5-A304-D217037876A8\t",
  "State": "active",
  "CreateTime": "1577786252000",
  "PortRanges": [ {
    "FromPort": 20,
    "ToPort": 20
  } ],
  "BackendPorts": [ {
    "FromPort": "80",
    "ToPort": "80"
  } ],
  "Certificates": [ {
    "Type": "Server",
    "Id": "449****-cn-hangzhou"
  } ],
  "Protocol": "TCP",
  "ListenerId": "lsr-bp1bpn0kn908w4nbw****",
  "ClientAffinity": "SOURCE_IP",
  "Name": "Listener",
  "RelatedAcls": [ {
    "AclId": "123",
    "Status": "off"
  } ],
  "AclType": "white",
  "AcceleratorId": "ga-bp1odcab8tmno0hdq****",
  "ProxyProtocol": false,
  "XForwardedForConfig": {
    "XForwardedForGaldEnabled": false,
    "XForwardedForGaApEnabled": false,
    "XForwardedForProtoEnabled": false,
    "XForwardedForPortEnabled": false,
    "XRealIpEnabled": false
  },
  "SecurityPolicyId": "tls_cipher_policy_1_0"
}
```

## Error codes

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

## 8.3. ListListeners

Queries the listeners of a Global Accelerator (GA) instance.

### Description

This API operation is used to query information about the listeners of a GA instance, including the status of each listener, the timestamp that indicates when each listener was created, and the listener ports.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

## Request parameters

| Parameter     | Type    | Required | Example                  | Description                                                                                         |
|---------------|---------|----------|--------------------------|-----------------------------------------------------------------------------------------------------|
| Action        | String  | Yes      | ListListeners            | The operation that you want to perform. Set the value to <b>ListListeners</b> .                     |
| RegionId      | String  | Yes      | cn-hangzhou              | The ID of the region where the GA instance is deployed. Set the value to <b>cn-hangzhou</b> .       |
| PageNumber    | Integer | No       | 1                        | The number of the page to return. Default value: <b>1</b> .                                         |
| PageSize      | Integer | No       | 10                       | The number of entries to return on each page. Maximum value: <b>50</b> . Default value: <b>10</b> . |
| AcceleratorId | String  | Yes      | ga-bp1odcab8tmno0hdq**** | The ID of the GA instance.                                                                          |

## Response parameters

| Parameter    | Type                 | Example               | Description                                                                                               |
|--------------|----------------------|-----------------------|-----------------------------------------------------------------------------------------------------------|
| TotalCount   | Integer              | 1                     | The total number of entries returned.                                                                     |
| Listeners    | Array of Listeners   |                       | The information about the listeners.                                                                      |
| Certificates | Array of Certificate |                       | The information about the SSL certificates.                                                               |
| Type         | String               | Server                | The type of the certificate.<br>Only <b>Server</b> can be returned, which indicates a server certificate. |
| Id           | String               | 44983xxxx-cn-hangzhou | The ID of the SSL certificate.                                                                            |
| BackendPorts | Array of BackendPort |                       | The information about the ports of the backend server.                                                    |

| Parameter      | Type                | Example                   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------|---------------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FromPort       | String              | 80                        | The starting port of the backend server.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| ToPort         | String              | 80                        | The ending port of the backend server.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| ListenerId     | String              | lsr-bp1bpn0kn908w4nbw**** | The ID of the listener.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Description    | String              | Listener                  | The description of the listener.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| State          | String              | active                    | <p>The status of the listener. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>active</b>: The listener is running as expected.</li> <li>• <b>creating</b>: The listener is being created.</li> <li>• <b>configuring</b>: The listener is being configured.</li> </ul>                                                                                                                                                                                                                                                                      |
| ClientAffinity | String              | SOURCE_IP                 | <p>Indicates whether client affinity is enabled for the listener.</p> <ul style="list-style-type: none"> <li>• If <b>NONE</b> is returned, client affinity is disabled. After client affinity is disabled, requests from a specific client IP address may be forwarded to different endpoints.</li> <li>• If <b>SOURCE_IP</b> is returned, client affinity is enabled. In this case, when a client accesses stateful applications, requests from the same client are forwarded to the same endpoint regardless of the source port or protocol.</li> </ul> |
| Protocol       | String              | TCP                       | <p>The network transmission protocol that is used by the listener. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>tcp</b>: TCP</li> <li>• <b>udp</b>: UDP</li> <li>• <b>http</b>: HTTP</li> <li>• <b>https</b>: HTTPS</li> </ul>                                                                                                                                                                                                                                                                                                           |
| CreateTime     | Long                | 1577786252000             | The timestamp that indicates when the listener was created.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| PortRanges     | Array of PortRanges |                           | The information about the listener ports.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

| Parameter               | Type    | Example                  | Description                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------|---------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FromPort                | Integer | 20                       | <p>The starting listener port that is used to receive and forward requests to endpoints.</p> <div>  <b>Note</b> You can configure only one listener port for an HTTP or HTTPS listener. In this case, the starting and ending listener ports are the same. </div>                                      |
| ToPort                  | Integer | 20                       | The ending listener port that is used to receive and forward requests to endpoints.                                                                                                                                                                                                                                                                                                     |
| Name                    | String  | Listener                 | The name of the listener.                                                                                                                                                                                                                                                                                                                                                               |
| ProxyProtocol           | Boolean | true                     | <p>Indicates whether client IP addresses are preserved. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>true</b>: client IP addresses are preserved. After this feature is enabled, backend servers can retrieve client IP addresses.</li> <li>• <b>false</b>: client IP addresses are not preserved.</li> </ul>                                                          |
| AcceleratorId           | String  | ga-bp1odcab8tmno0hdq**** | The ID of the GA instance.                                                                                                                                                                                                                                                                                                                                                              |
| XForwardedForConfig     | Object  |                          | The configuration of the <code>XForward</code> field.                                                                                                                                                                                                                                                                                                                                   |
| XForwardedForGidEnabled | Boolean | false                    | <p>Indicates whether the <code>GA-ID</code> header is used to retrieve the ID of the GA instance. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>true</b>: yes</li> <li>• <b>false</b>: no</li> </ul> <div>  <b>Note</b> Only HTTP and HTTPS listeners support this parameter. </div> |

| Parameter                 | Type    | Example | Description                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------|---------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| XRealIpEnabled            | Boolean | false   | <p>Indicates whether the <b>X-Real-IP</b> header is used to retrieve client IP addresses. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>true</b>: yes</li> <li>• <b>false</b>: no</li> </ul> <p> <b>Note</b> Only HTTP and HTTPS listeners support this parameter.</p>                                 |
| XForwardedForGaApEnabled  | Boolean | false   | <p>Indicates whether the <b>GA-AP</b> header is used to retrieve the information about the acceleration area. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>true</b>: yes</li> <li>• <b>false</b>: no</li> </ul> <p> <b>Note</b> Only HTTP and HTTPS listeners support this parameter.</p>           |
| XForwardedForProtoEnabled | Boolean | false   | <p>Indicates whether the <b>GA-X-Forward-Proto</b> header is used to retrieve the listener protocol of the GA instance. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>true</b>: yes</li> <li>• <b>false</b>: no</li> </ul> <p> <b>Note</b> Only HTTP and HTTPS listeners support this parameter.</p> |
| XForwardedForPortEnabled  | Boolean | false   | <p>Indicates whether the <b>GA-X-Forward-Port</b> header is used to retrieve the listener ports of the GA instance. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>true</b>: yes</li> <li>• <b>false</b>: no</li> </ul> <p> <b>Note</b> Only HTTP and HTTPS listeners support this parameter.</p>     |
|                           |         |         | <p>The ID of the security policy. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>tls_cipher_policy_1_0</b></li> </ul>                                                                                                                                                                                                                                                                    |

| Parameter        | Type   | Example               | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------|--------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SecurityPolicyId | String | tls_cipher_policy_1_0 | <ul style="list-style-type: none"> <li>Supported TLS versions: TLS 1.0, TLS 1.1, and TLS 1.2.</li> <li>Supported cipher suites: ECDHE-RSA-AES128-GCM-SHA256, ECDHE-RSA-AES256-GCM-SHA384, ECDHE-RSA-AES128-SHA256, ECDHE-RSA-AES256-SHA384, AES128-GCM-SHA256, AES256-GCM-SHA384, AES128-SHA256, AES256-SHA256, ECDHE-RSA-AES128-SHA, ECDHE-RSA-AES256-SHA, AES128-SHA, AES256-SHA, and DES-CBC3-SHA.</li> <li><b>tls_cipher_policy_1_1</b> <ul style="list-style-type: none"> <li>Supported TLS versions: TLS 1.1 and TLS 1.2.</li> <li>Supported cipher suites: ECDHE-RSA-AES128-GCM-SHA256, ECDHE-RSA-AES256-GCM-SHA384, ECDHE-RSA-AES128-SHA256, ECDHE-RSA-AES256-SHA384, AES128-GCM-SHA256, AES256-GCM-SHA384, AES128-SHA256, AES256-SHA256, ECDHE-RSA-AES128-SHA, ECDHE-RSA-AES256-SHA, AES128-SHA, AES256-SHA, and DES-CBC3-SHA.</li> </ul> </li> <li><b>tls_cipher_policy_1_2</b> <ul style="list-style-type: none"> <li>Supported TLS version: TLS 1.2.</li> <li>Supported cipher suites: ECDHE-RSA-AES128-GCM-SHA256, ECDHE-RSA-AES256-GCM-SHA384, ECDHE-RSA-AES128-SHA256, ECDHE-RSA-AES256-SHA384, AES128-GCM-SHA256, AES256-GCM-SHA384, AES128-SHA256, AES256-SHA256, ECDHE-RSA-AES128-SHA, ECDHE-RSA-AES256-SHA, AES128-SHA, AES256-SHA, and DES-CBC3-SHA.</li> </ul> </li> <li><b>tls_cipher_policy_1_2_strict</b> <ul style="list-style-type: none"> <li>Supported TLS version: TLS 1.2.</li> <li>Supported cipher suites: ECDHE-RSA-AES128-GCM-SHA256, ECDHE-RSA-AES256-GCM-SHA384, ECDHE-RSA-AES128-SHA256, ECDHE-RSA-AES256-SHA384, ECDHE-RSA-AES128-SHA, and ECDHE-RSA-AES256-SHA.</li> </ul> </li> <li><b>tls_cipher_policy_1_2_strict_with_1_3</b> <ul style="list-style-type: none"> <li>Supported TLS versions: TLS 1.2 and TLS 1.3.</li> </ul> </li> </ul> |

| Parameter  | Type    | Example                              | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------|---------|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|            |         |                                      | <ul style="list-style-type: none"> <li>Supported cipher suites: TLS_AES_128_GCM_SHA256, TLS_AES_256_GCM_SHA384, TLS_CHACHA20_POLY1305_SHA256, TLS_AES_128_CCM_SHA256, TLS_AES_128_CCM_8_SHA256, ECDHE-ECDSA-AES128-GCM-SHA256, ECDHE-ECDSA-AES256-GCM-SHA384, ECDHE-ECDSA-AES128-SHA256, ECDHE-ECDSA-AES256-SHA384, ECDHE-RSA-AES128-GCM-SHA256, ECDHE-RSA-AES256-GCM-SHA384, ECDHE-RSA-AES128-SHA256, ECDHE-RSA-AES256-SHA384, ECDHE-ECDSA-AES128-SHA, ECDHE-ECDSA-AES256-SHA, ECDHE-RSA-AES128-SHA, and ECDHE-RSA-AES256-SHA.</li> </ul> <div>  <b>Note</b> Only HTTPS listeners support this parameter.         </div> |
| PageSize   | Integer | 10                                   | The number of entries returned per page.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| RequestId  | String  | 6FEA0CF3-D3B9-43E5-A304-D217037876A8 | The ID of the request.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| PageNumber | Integer | 1                                    | The page number of the returned page.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=ListListeners
&RegionId=cn-hangzhou
&PageNumber=1
&PageSize=10
&AcceleratorId=ga-bp1odcab8tmno0hdq****
&Common request parameters
```

### Sample success responses

XML format

```

HTTP/1.1 200 OK
Content-Type:application/xml
<ListListenersResponse>
  <TotalCount>1</TotalCount>
  <Listeners>
    <Certificates>
      <Type>Server</Type>
      <Id>44983xxx-cn-hangzhou</Id>
    </Certificates>
    <BackendPorts>
      <FromPort>80</FromPort>
      <ToPort>80</ToPort>
    </BackendPorts>
    <ListenerId>lsr-bp1bpn0kn908w4nbw****</ListenerId>
    <Description>Listener</Description>
    <State>active</State>
    <ClientAffinity>SOURCE_IP</ClientAffinity>
    <Protocol>TCP</Protocol>
    <CreateTime>1577786252000</CreateTime>
    <PortRanges>
      <FromPort>20</FromPort>
      <ToPort>20</ToPort>
    </PortRanges>
    <Name>Listener</Name>
    <ProxyProtocol>true</ProxyProtocol>
    <AcceleratorId>ga-bp1odcab8tmno0hdq****</AcceleratorId>
    <XForwardedForConfig>
      <XForwardedForGaldEnabled>false</XForwardedForGaldEnabled>
      <XRealIpEnabled>false</XRealIpEnabled>
      <XForwardedForGaApEnabled>false</XForwardedForGaApEnabled>
      <XForwardedForProtoEnabled>false</XForwardedForProtoEnabled>
      <XForwardedForPortEnabled>false</XForwardedForPortEnabled>
    </XForwardedForConfig>
    <SecurityPolicyId>tls_cipher_policy_1_0</SecurityPolicyId>
  </Listeners>
  <PageSize>10</PageSize>
  <RequestId>6FEA0CF3-D3B9-43E5-A304-D217037876A8</RequestId>
  <PageNumber>1</PageNumber>
</ListListenersResponse>

```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "TotalCount": 1,
  "Listeners": [{
    "Certificates": [{
      "Type": "Server",
      "Id": "44983xxxx-cn-hangzhou"
    }],
    "BackendPorts": [{
      "FromPort": "80",
      "ToPort": "80"
    }],
    "ListenerId": "lsr-bp1bpn0kn908w4nbw****",
    "Description": "Listener",
    "State": "active",
    "ClientAffinity": "SOURCE_IP",
    "Protocol": "TCP",
    "CreateTime": 1577786252000,
    "PortRanges": [{
      "FromPort": 20,
      "ToPort": 20
    }],
    "Name": "Listener",
    "ProxyProtocol": true,
    "AcceleratorId": "ga-bp1odcab8tmno0hdq****",
    "XForwardedForConfig": {
      "XForwardedForGaldEnabled": false,
      "XRealIpEnabled": false,
      "XForwardedForGaApEnabled": false,
      "XForwardedForProtoEnabled": false,
      "XForwardedForPortEnabled": false
    },
    "SecurityPolicyId": "tls_cipher_policy_1_0"
  }],
  "PageSize": 10,
  "RequestId": "6FEA0CF3-D3B9-43E5-A304-D217037876A8",
  "PageNumber": 1
}
```

## Error codes

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

# 8.4. UpdateListener

Modifies the configurations of a specified listener of a Global Accelerator (GA) instance.

## Description

This API operation is used to modify the protocol, port, and endpoint group of a specified listener to meet your business requirements.

## Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

## Request parameters

| Parameter      | Type   | Required | Example                              | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------|--------|----------|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action         | String | Yes      | UpdateListener                       | The operation that you want to perform. Set the value to <b>UpdateListener</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| RegionId       | String | No       | cn-hangzhou                          | The ID of the region where the GA instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| ClientToken    | String | No       | 123e4567-e89b-12d3-a456-426655440000 | The client token that is used to ensure the idempotence of the request.<br><br>You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length.                                                                                                                                                                                                                                                                          |
| Name           | String | No       | Listener                             | The name of the listener.<br><br>The name must be 2 to 128 characters in length, and can contain letters, digits, underscores (_), and hyphens (-). The name must start with a letter.                                                                                                                                                                                                                                                                                                                                                                       |
| Description    | String | No       | Listener                             | The description of the listener.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| ClientAffinity | String | No       | SOURCE_IP                            | Specifies whether to enable client affinity for the listener. <ul style="list-style-type: none"><li>If this parameter is left empty, client affinity is disabled. After client affinity is disabled, requests from a specific client IP address may be forwarded to different endpoints.</li><li>If this parameter is set to <b>SOURCE_IP</b>, client affinity is enabled. In this case, when a client accesses stateful applications, requests from the same client are forwarded to the same endpoint regardless of the source port or protocol.</li></ul> |

| Parameter                    | Type    | Required | Example                   | Description                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------|---------|----------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protocol                     | String  | No       | tcp                       | <p>The network transmission protocol that is used by the listener. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>tcp</b>: TCP</li> <li>• <b>udp</b>: UDP</li> <li>• <b>http</b>: HTTP</li> <li>• <b>https</b>: HTTPS</li> </ul>                                                                                                                                                                   |
| ListenerId                   | String  | Yes      | lsr-bp1bpn0kn908w4nbw**** | The ID of the listener.                                                                                                                                                                                                                                                                                                                                                                                           |
| ProxyProtocol                | String  | No       | false                     | <p>Specifies whether to preserve client IP addresses. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>true</b>: preserves client IP addresses. After this feature is enabled, backend servers can retrieve client IP addresses.</li> <li>• <b>false</b> (default): does not preserve client IP addresses.</li> </ul>                                                                                |
| XForwardedForConfig          | Object  | No       |                           | The configuration of the <b>XForward</b> field.                                                                                                                                                                                                                                                                                                                                                                   |
| XForwardedForGatedEnabled    | Boolean | No       | false                     | <p>Specifies whether to use the <b>GA-ID</b> header to retrieve the ID of the GA instance. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>true</b>: yes</li> <li>• <b>false</b> (default): no</li> </ul> <p> <b>Note</b> Only HTTP and HTTPS listeners support this parameter.</p>                             |
| XForwardedForProtocolEnabled | Boolean | No       | false                     | <p>Specifies whether to use the <b>GA-X-Forward-Proto</b> header to retrieve the listener protocol of the GA instance. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>true</b>: yes</li> <li>• <b>false</b> (default): no</li> </ul> <p> <b>Note</b> Only HTTP and HTTPS listeners support this parameter.</p> |

| Parameter                | Type    | Required | Example | Description                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------|---------|----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| XForwardedForPortEnabled | Boolean | No       | false   | <p>Specifies whether to use the <b>GA-X-Forward-Port</b> header to retrieve the listener ports of the GA instance. Valid values:</p> <ul style="list-style-type: none"> <li><b>true</b>: yes</li> <li><b>false</b> (default): no</li> </ul> <p> <b>Note</b> Only HTTP and HTTPS listeners support this parameter.</p> |
| XRealIpEnabled           | Boolean | No       | false   | <p>Specifies whether to use the <b>X-Real-IP</b> header to retrieve client IP addresses. Valid values:</p> <ul style="list-style-type: none"> <li><b>true</b>: yes</li> <li><b>false</b> (default): no</li> </ul> <p> <b>Note</b> Only HTTP and HTTPS listeners support this parameter.</p>                           |
| XForwardedForGaApEnabled | Boolean | No       | false   | <p>Specifies whether to use the <b>GA-AP</b> header to retrieve the information about the acceleration area. Valid values:</p> <ul style="list-style-type: none"> <li><b>true</b>: yes</li> <li><b>false</b> (default): no</li> </ul> <p> <b>Note</b> Only HTTP and HTTPS listeners support this parameter.</p>     |
|                          |         |          |         | <p>The ID of the security policy. Valid values:</p> <ul style="list-style-type: none"> <li><b>tls_cipher_policy_1_0</b> <ul style="list-style-type: none"> <li>Supported TLS versions: TLS 1.0, TLS 1.1, and TLS 1.2.</li> </ul> </li> </ul>                                                                                                                                                            |

| Parameter        | Type   | Required | Example               | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------|--------|----------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SecurityPolicyId | String | No       | tls_cipher_policy_1_0 | <ul style="list-style-type: none"> <li>Supported cipher suites: ECDHE-RSA-AES128-GCM-SHA256, ECDHE-RSA-AES256-GCM-SHA384, ECDHE-RSA-AES128-SHA256, ECDHE-RSA-AES256-SHA384, AES128-GCM-SHA256, AES256-GCM-SHA384, AES128-SHA256, AES256-SHA256, ECDHE-RSA-AES128-SHA, ECDHE-RSA-AES256-SHA, AES128-SHA, AES256-SHA, and DES-CBC3-SHA.</li> <li><b>tls_cipher_policy_1_1</b> <ul style="list-style-type: none"> <li>Supported TLS versions: TLS 1.1 and TLS 1.2.</li> <li>Supported cipher suites: ECDHE-RSA-AES128-GCM-SHA256, ECDHE-RSA-AES256-GCM-SHA384, ECDHE-RSA-AES128-SHA256, ECDHE-RSA-AES256-SHA384, AES128-GCM-SHA256, AES256-GCM-SHA384, AES128-SHA256, AES256-SHA256, ECDHE-RSA-AES128-SHA, ECDHE-RSA-AES256-SHA, AES128-SHA, AES256-SHA, and DES-CBC3-SHA.</li> </ul> </li> <li><b>tls_cipher_policy_1_2</b> <ul style="list-style-type: none"> <li>Supported TLS version: TLS 1.2.</li> <li>Supported cipher suites: ECDHE-RSA-AES128-GCM-SHA256, ECDHE-RSA-AES256-GCM-SHA384, ECDHE-RSA-AES128-SHA256, ECDHE-RSA-AES256-SHA384, AES128-GCM-SHA256, AES256-GCM-SHA384, AES128-SHA256, AES256-SHA256, ECDHE-RSA-AES128-SHA, ECDHE-RSA-AES256-SHA, AES128-SHA, AES256-SHA, and DES-CBC3-SHA.</li> </ul> </li> <li><b>tls_cipher_policy_1_2_strict</b> <ul style="list-style-type: none"> <li>Supported TLS version: TLS 1.2.</li> <li>Supported cipher suites: ECDHE-RSA-AES128-GCM-SHA256, ECDHE-RSA-AES256-GCM-SHA384, ECDHE-RSA-AES128-SHA256, ECDHE-RSA-AES256-SHA384, ECDHE-RSA-AES128-SHA, and ECDHE-RSA-AES256-SHA.</li> </ul> </li> <li><b>tls_cipher_policy_1_2_strict_with_1_3</b> <ul style="list-style-type: none"> <li>Supported TLS versions: TLS 1.2 and TLS 1.3.</li> </ul> </li> </ul> |

| Parameter               | Type    | Required | Example             | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------|---------|----------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                         |         |          |                     | <ul style="list-style-type: none"> <li>Supported cipher suites:           <ul style="list-style-type: none"> <li>TLS_AES_128_GCM_SHA256,</li> <li>TLS_AES_256_GCM_SHA384,</li> <li>TLS_CHACHA20_POLY1305_SHA256,</li> <li>TLS_AES_128_CCM_SHA256,</li> <li>TLS_AES_128_CCM_8_SHA256,</li> <li>ECDHE-ECDSA-AES128-GCM-SHA256,</li> <li>ECDHE-ECDSA-AES256-GCM-SHA384,</li> <li>ECDHE-ECDSA-AES128-SHA256,</li> <li>ECDHE-ECDSA-AES256-SHA384,</li> </ul> </li> </ul>                                                                      |
| PortRanges.N.FromPort   | Integer | Yes      | 20                  | <p>The starting listener port that is used to receive and forward requests to endpoints.</p> <p>  <b>Note</b> For HTTPS listeners, you can configure only one listener port for an HTTP or HTTPS listener. In this case, the starting and ending listener ports are the same.           <br/>  <b>Note</b> Only HTTPS listeners support this parameter.         </p> |
| PortRanges.N.ToPort     | Integer | Yes      | 21                  | The ending listener port that is used to receive and forward requests to endpoints.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Certificates.N.Id       | String  | No       | 449****-cn-hangzhou | <p>The ID of the SSL certificate.</p> <p>  <b>Note</b> This parameter is required only when you configure an HTTPS listener.         </p>                                                                                                                                                                                                                                                                                                            |
| BackendPorts.N.FromPort | Integer | No       | 80                  | <p>The starting port that is used by the backend server to receive requests.</p> <p>  <b>Note</b> This parameter is required only when you configure an HTTPS listener and the listener port is the same port used by the backend server to provide services. When you use an HTTPS listener, the starting port that is used to receive requests for the backend server must be the same as the ending port.         </p>                            |
| BackendPorts.N.ToPort   | Integer | No       | 80                  | The ending port that is used by the backend server to receive requests.                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

## Response parameters

| Parameter | Type   | Example                              | Description            |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | 6FEA0CF3-D3B9-43E5-A304-D217037876A8 | The ID of the request. |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=UpdateListener
&RegionId=cn-hangzhou
&ClientToken=123e4567-e89b-12d3-a456-426655440000
&Name=Listener
&Description=Listener
&ClientAffinity=SOURCE_IP
&Protocol=tcp
&ListenerId=lsr-bp1bpn0kn908w4nbw****
&ProxyProtocol=false
&PortRanges=[{"FromPort":20,"ToPort":21}]
&Certificates=[{"Id":"449****-cn-hangzhou"}]
&BackendPorts=[{"FromPort":80,"ToPort":80}]
&XForwardedForConfig={"XForwardedForGaldEnabled":false,"XForwardedForProtoEnabled":false,"XForwardedForPortEnabled":false,"XRealIpEnabled":false,"XForwardedForGaApEnabled":false}
&SecurityPolicyId=tls_cipher_policy_1_0
&Common request parameters
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<UpdateListenerResponse>
  <RequestId>6FEA0CF3-D3B9-43E5-A304-D217037876A8 </RequestId>
</UpdateListenerResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "6FEA0CF3-D3B9-43E5-A304-D217037876A8\t"
}
```

## Error codes

| HttpCode | Error code | Error message | Description |
|----------|------------|---------------|-------------|
|----------|------------|---------------|-------------|

| HttpCode | Error code                       | Error message                                                | Description                                                                                                        |
|----------|----------------------------------|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| 400      | NotActive.Listener               | The state of the listener is not active.                     | The error message returned because the specified listener is unstable.                                             |
| 400      | PortRangeIllegal.Listener        | The specified listener port range is invalid.                | The error message returned because the specified port range is invalid.                                            |
| 400      | PortConflict.Listener            | The listener port configuration is in conflict.              | The error message returned because the specified listener port is already used.                                    |
| 400      | QuotaExceeded.ListenerPort       | The maximum number of listener ports is exceeded.            | The error message returned because the number of listener ports has reached the upper limit.                       |
| 400      | NotExist.Accelerator             | The accelerated instance does not exist.                     | The error message returned because the specified GA instance does not exist.                                       |
| 400      | StateError.Accelerator           | The state of the accelerated instance is invalid.            | The error message returned because the specified GA instance is in an invalid state.                               |
| 400      | PortRanges.MustOne               | The portRanges must be one for HTTPS and HTTP type listener. | The error message returned because an HTTP or HTTPS listener supports only one port.                               |
| 400      | SecurityPolicyIdIllegal.Listener | The listener security policy ID %s is illegal.               | The error message returned because the security policy ID of the listener is invalid.                              |
| 400      | SecurityPolicyId.NotNeed         | No security policy ID is required for the listener.          | The error message returned because you do not need to configure the security policy ID for the specified listener. |

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

## 8.5. DeleteListener

Deletes a listener.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates a sample code of the operation for different SDKs.

### Request parameters

| Parameter     | Type   | Required | Example                              | Description                                                                                                                                                                                                                                                                  |
|---------------|--------|----------|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action        | String | Yes      | DeleteListener                       | The operation that you want to perform. Set the value to <b>DeleteListener</b> .                                                                                                                                                                                             |
| ClientToken   | String | No       | 123e4567-e89b-12d3-a456-426655440000 | The client token that is used to ensure the idempotence of the request. You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length. |
| AcceleratorId | String | No       | ga-bp1odcab8tmno0hdq****             | The ID of the Global Accelerator (GA) instance.                                                                                                                                                                                                                              |
| ListenerId    | String | Yes      | lsr-bp1bpn0kn908w4nbw****            | The ID of the listener that you want to delete.                                                                                                                                                                                                                              |

## Response parameters

| Parameter | Type   | Example                              | Description            |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | 6FEA0CF3-D3B9-43E5-A304-D217037876A8 | The ID of the request. |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=DeleteListener
&ClientToken=123e4567-e89b-12d3-a456-426655440000
&AcceleratorId=ga-bp1odcab8tmno0hdq****
&ListenerId=lsr-bp1bpn0kn908w4nbw****
&<Common request parameters>
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<DeleteListenerResponse>
  <RequestId>6FEA0CF3-D3B9-43E5-A304-D217037876A8 </RequestId>
</DeleteListenerResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "6FEA0CF3-D3B9-43E5-A304-D217037876A8\t"
}
```

## Error codes

| HttpCode | Error code             | Error message                                     | Description                                                                  |
|----------|------------------------|---------------------------------------------------|------------------------------------------------------------------------------|
| 400      | NotExist.Listener      | The listener does not exist.                      | The error message returned because the specified listener does not exist.    |
| 400      | NotActive.Listener     | The state of the listener is not active.          | The error message returned because the specified listener is unstable.       |
| 400      | NotExist.Accelerator   | The accelerated instance does not exist.          | The error message returned because the specified GA instance does not exist. |
| 400      | StateError.Accelerator | The state of the accelerated instance is invalid. | The error message returned because the specified GA instance is invalid.     |

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

## 8.6. GetHealthStatus

Queries the health status of listeners.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

### Request parameters

| Parameter | Type   | Required | Example         | Description                                                                                                        |
|-----------|--------|----------|-----------------|--------------------------------------------------------------------------------------------------------------------|
| Action    | String | Yes      | GetHealthStatus | The operation that you want to perform. Set the value to <b>GetHealthStatus</b> .                                  |
| RegionId  | String | Yes      | cn-hangzhou     | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> . |

| Parameter     | Type    | Required | Example                            | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------|---------|----------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ClientToken   | String  | No       | 5A2CFF0E-5718-45B5-9D4D-70B3FF3898 | <p>The client token that is used to ensure the idempotence of the request.</p> <p>You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can only contain ASCII characters and cannot exceed 64 characters in length.</p>                                                                                                                                                                                                                                                                                    |
| DryRun        | Boolean | No       | true                               | <p>Specifies whether only to precheck the request. Valid values:</p> <ul style="list-style-type: none"> <li><b>true</b>: prechecks the request without creating resources. The system checks the required parameters, request format, and service limits. If the precheck fails, an error message is returned. If the precheck is successful, the error code <b>DryRunOperation</b> is returned.</li> <li><b>false</b>: sends the request. If the precheck is successful, a 2xx HTTP status code is returned and the operation is performed. Default value: false.</li> </ul> |
| AcceleratorId | String  | Yes      | ga-bp1odcab8tmno0hdq****           | The ID of the GA instance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| ListenerId    | String  | Yes      | lsr-bp1bpn0kn908w4nbw****          | The ID of the listener.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

## Response parameters

| Parameter  | Type   | Example                              | Description             |
|------------|--------|--------------------------------------|-------------------------|
| RequestId  | String | 64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF | The ID of the request.  |
| ListenerId | String | lsr-bp1bpn0kn908w4nbw****            | The ID of the listener. |

| Parameter         | Type                                 | Example                      | Description                                                                                                                                                                                                                                                                                                                                                          |
|-------------------|--------------------------------------|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HealthStatus      | String                               | normal                       | The health status of the listener. Valid values: <ul style="list-style-type: none"> <li><b>normal</b>: The listener is running as expected.</li> <li><b>Abnormal</b>: The listener is abnormal.</li> <li><b>partiallyAbnormal</b>: Some endpoint groups that are associated with the listener are abnormal.</li> </ul>                                               |
| EndpointGroups    | Array of endpointGroupHealthStatuses |                              | The information about the endpoint groups.                                                                                                                                                                                                                                                                                                                           |
| EndpointGroupId   | String                               | epg-bp14sz7ftcwwjgrdm****    | The ID of the endpoint group.                                                                                                                                                                                                                                                                                                                                        |
| EndpointGroupType | String                               | default                      | The type of the endpoint group. Valid values: <ul style="list-style-type: none"> <li><b>default</b>: a default endpoint group</li> <li><b>virtual</b>: a virtual endpoint group</li> </ul>                                                                                                                                                                           |
| HealthStatus      | String                               | normal                       | The health status of the endpoint group. Valid values: <ul style="list-style-type: none"> <li><b>init</b>: The endpoint group is being initialized.</li> <li><b>normal</b>: The endpoint group is normal.</li> <li><b>abnormal</b>: The endpoint group is abnormal.</li> <li><b>partiallyAbnormal</b>: Some endpoints in the endpoint group are abnormal.</li> </ul> |
| ForwardingRuleIds | Array of String                      | frule-bp134k63nmtwmnw eexxxx | The IDs of the forwarding rules.                                                                                                                                                                                                                                                                                                                                     |
| Endpoints         | Array of endpointHealthStatuses      |                              | The information about the endpoints.                                                                                                                                                                                                                                                                                                                                 |
| EndpointId        | String                               | ep-hp33b2e43fays7s8**        | The ID of the endpoint.                                                                                                                                                                                                                                                                                                                                              |
| Address           | String                               | 127.xxx.xxx.xxx              | The IP address of the endpoint.                                                                                                                                                                                                                                                                                                                                      |

| Parameter    | Type   | Example | Description                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|--------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HealthStatus | String | normal  | The health status of the endpoint. Valid values: <ul style="list-style-type: none"><li>• <b>init</b>: The endpoint is being initialized.</li><li>• <b>normal</b>: The endpoint is normal.</li><li>• <b>Abnormal</b>: The endpoint is abnormal.</li><li>• </li></ul>                                                                                                         |
| HealthDetail | String | None    | The health check details of the endpoint.                                                                                                                                                                                                                                                                                                                                   |
| Port         | Long   | 80      | The port number that is used to connect to the endpoint.                                                                                                                                                                                                                                                                                                                    |
| Type         | String | Ip      | The type of the endpoint. Valid values: <ul style="list-style-type: none"><li>• <b>Domain</b>: a custom domain name</li><li>• <b>Ip</b>: a custom IP address</li><li>• <b>PublicIp</b>: a public IP address provided by Alibaba Cloud</li><li>• <b>ECS</b>: an Elastic Compute Service (ECS) instance</li><li>• <b>SLB</b>: a Server Load Balancer (SLB) instance</li></ul> |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=GetHealthStatus
&RegionId=cn-hangzhou
&ClientToken=5A2CFF0E-5718-45B5-9D4D-70B3FF3898
&DryRun=true
&AcceleratorId=ga-bp1odcab8tmno0hdq****
&ListenerId=lsr-bp1bpn0kn908w4nbw****
&<Common request parameters>
```

### Sample success responses

XML format

```

HTTP/1.1 200 OK
Content-Type:application/xml
<GetHealthStatusResponse>
  <RequestId>64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF</RequestId>
  <ListenerId>lsr-bp1bpn0kn908w4nbw****</ListenerId>
  <HealthStatus>normal</HealthStatus>
  <EndpointGroups>
    <EndpointGroupId>epg-bp14sz7ftcwwjgrdm****</EndpointGroupId>
    <EndpointGroupType>default</EndpointGroupType>
    <HealthStatus>normal</HealthStatus>
    <ForwardingRuleIds>frule-bp134k63nmtwmnweexxx</ForwardingRuleIds>
    <Endpoints>
      <EndpointId>ep-hp33b2e43fays7s8****</EndpointId>
      <Address>127.xxx.xxx.xxx</Address>
      <HealthStatus>normal</HealthStatus>
      <HealthDetail>None</HealthDetail>
      <Port>80</Port>
      <Type>Ip</Type>
    </Endpoints>
  </EndpointGroups>
</GetHealthStatusResponse>

```

#### JSON format

```

HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF",
  "ListenerId": "lsr-bp1bpn0kn908w4nbw****",
  "HealthStatus": "normal",
  "EndpointGroups": [ {
    "EndpointGroupId": "epg-bp14sz7ftcwwjgrdm****",
    "EndpointGroupType": "default",
    "HealthStatus": "normal",
    "ForwardingRuleIds": [ "frule-bp134k63nmtwmnweexxx" ],
    "Endpoints": [ {
      "EndpointId": "ep-hp33b2e43fays7s8****",
      "Address": "127.xxx.xxx.xxx",
      "HealthStatus": "normal",
      "HealthDetail": "None",
      "Port": 80,
      "Type": "Ip"
    } ]
  } ]
}

```

## Error codes

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

## 8.7. AssociateAdditionalCertificatesWithListener

Associates an additional certificate with an HTTPS listener.

### Description

You can associate additional certificates with only HTTPS listeners.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

### Request parameters

| Parameter         | Type   | Required | Example                                     | Description                                                                                                                                                                                                                                                                            |
|-------------------|--------|----------|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action            | String | Yes      | AssociateAdditionalCertificatesWithListener | The operation that you want to perform. Set the value to <b>AssociateAdditionalCertificatesWithListener</b> .                                                                                                                                                                          |
| RegionId          | String | Yes      | cn-hangzhou                                 | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                     |
| ClientToken       | String | No       | 123e4567-e89b-12d3-a456-426655440000        | The client token that is used to ensure the idempotence of the request.<br><br>You can use the client to generate the value, but you must make sure that it is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length. |
| AcceleratorId     | String | Yes      | ga-bp1odcab8tmno0hdq****                    | The ID of the GA instance.                                                                                                                                                                                                                                                             |
| ListenerId        | String | Yes      | lsr-bp1bpn0kn908w4nbw****                   | The ID of the listener. Only HTTPS listeners support this parameter.                                                                                                                                                                                                                   |
| Certificates.N.Id | String | Yes      | 6092**-cn-hangzhou                          | The certificate IDs. You must enter IDs of server certificates.                                                                                                                                                                                                                        |

| Parameter             | Type   | Required | Example     | Description                                                                                                                   |
|-----------------------|--------|----------|-------------|-------------------------------------------------------------------------------------------------------------------------------|
| Certificates.N.Domain | String | Yes      | example.com | The domain name specified by the certificate.<br><br>You can associate each domain name with only one additional certificate. |

## Response parameters

| Parameter  | Type   | Example                              | Description             |
|------------|--------|--------------------------------------|-------------------------|
| RequestId  | String | 6FEA0CF3-D3B9-43E5-A304-D217037876A8 | The ID of the request.  |
| ListenerId | String | lsr-bp1bpn0kn908w4nbw****            | The ID of the listener. |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=AssociateAdditionalCertificatesWithListener
&RegionId=cn-hangzhou
&ClientToken=123e4567-e89b-12d3-a456-426655440000
&AcceleratorId=ga-bp1odcab8tmno0hdq****
&ListenerId=lsr-bp1bpn0kn908w4nbw****
&Certificates=[{"Id":"6092**-cn-hangzhou","Domain":"example.com"}]
&Common request parameters
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<AssociateAdditionalCertificatesWithListenerResponse>
  <RequestId>6FEA0CF3-D3B9-43E5-A304-D217037876A8</RequestId>
  <ListenerId>lsr-bp1bpn0kn908w4nbw****</ListenerId>
</AssociateAdditionalCertificatesWithListenerResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "6FEA0CF3-D3B9-43E5-A304-D217037876A8",
  "ListenerId": "lsr-bp1bpn0kn908w4nbw****"
}
```

## Error codes

| HttpCode | Error code                         | Error message                                                                                                                                               | Description                                                                                                                                                                      |
|----------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 400      | ProtocalIllegal.Listener           | The specified listener protocol is invalid.                                                                                                                 | The error message returned because the protocol of the specified listener is invalid.                                                                                            |
| 400      | NotExist.Accelerator               | The accelerated instance does not exist.                                                                                                                    | The error message returned because the specified GA instance does not exist.                                                                                                     |
| 400      | StateError.Accelerator             | The state of the accelerated instance is invalid.                                                                                                           | The error message returned because the specified GA instance is in an invalid state.                                                                                             |
| 400      | QuotaExceeded.Listener             | The maximum number of listeners is exceeded.                                                                                                                | The error message returned because the number of listeners has reached the upper limit.                                                                                          |
| 400      | PortRangeIllegal.Listener          | The specified listener port range is invalid.                                                                                                               | The error message returned because the specified port range is invalid.                                                                                                          |
| 400      | PortConflict.Listener              | The listener port configuration is in conflict.                                                                                                             | The error message returned because the configuration of the specified listener port conflicts with that of another listener port.                                                |
| 400      | QuotaExceeded.ListenerPort         | The maximum number of listener ports is exceeded.                                                                                                           | The error message returned because the number of listener ports has reached the upper limit.                                                                                     |
| 400      | PortRangeIllegal.ExceededGaAbility | The listener port range is invalid. For each accelerator instance, you can only create a listener with port range over 300 for each protocol (TCP and UDP). | The error message returned because the listener port range is invalid. For each GA instance, you can create only one TCP and one UDP listener with a port range larger than 300. |
| 400      | PortRangeIllegal.UDP               | UDP ports 250, 4789, and 4790 are system reserved ports.                                                                                                    | The error message returned because you cannot specify ports 250, 4789, or 4790 for UDP listeners. They are reserved by the system.                                               |
| 400      | SystemPort.Listener                | Ports 65500-65535 are system reserved ports.                                                                                                                | The error message returned because ports 65500 to 65535 are reserved by the system.                                                                                              |
| 400      | PortRanges.MustOne                 | The portRanges must be one for HTTPS and HTTP type listener.                                                                                                | The error message returned because an HTTP or HTTPS listener supports only one port.                                                                                             |

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

## 8.8.

# DissociateAdditionalCertificatesFromListener

Disassociates an additional certificate from an HTTPS listener.

## Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

## Request parameters

| Parameter     | Type   | Required | Example                                      | Description                                                                                                                                                                                                                                                                            |
|---------------|--------|----------|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action        | String | Yes      | DissociateAdditionalCertificatesFromListener | The operation that you want to perform. Set the value to <b>DissociateAdditionalCertificatesFromListener</b> .                                                                                                                                                                         |
| RegionId      | String | Yes      | cn-hangzhou                                  | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                     |
| ClientToken   | String | No       | 123e4567-e89b-12d3-a456-426655440000         | The client token that is used to ensure the idempotence of the request.<br><br>You can use the client to generate the value, but you must make sure that it is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length. |
| AcceleratorId | String | Yes      | ga-bp1odcab8tmno0hdq****                     | The ID of the GA instance.                                                                                                                                                                                                                                                             |
| ListenerId    | String | Yes      | lsr-bp1bpn0kn908w4nbw****                    | The ID of the listener.                                                                                                                                                                                                                                                                |
| Domains.N     | String | Yes      | example.com                                  | The domain name associated with the additional certificate.                                                                                                                                                                                                                            |

## Response parameters

| Parameter | Type   | Example                              | Description            |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | 6FEA0CF3-D3B9-43E5-A304-D217037876A8 | The ID of the request. |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=DissociateAdditionalCertificatesFromListener
&RegionId=cn-hangzhou
&ClientToken=123e4567-e89b-12d3-a456-426655440000
&AcceleratorId=ga-bp1odcab8tmno0hdq****
&ListenerId=lsr-bp1bpn0kn908w4nbw****
&Domains=["example.com"]
&Common request parameters
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<DissociateAdditionalCertificatesFromListenerResponse>
  <RequestId>6FEA0CF3-D3B9-43E5-A304-D217037876A8</RequestId>
</DissociateAdditionalCertificatesFromListenerResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "6FEA0CF3-D3B9-43E5-A304-D217037876A8"
}
```

## Error codes

| HttpCode | Error code                            | Error message                                                                                                                    | Description                                                                                                                                                      |
|----------|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 400      | AlreadyInBandwidthPackage.Accelerator | The accelerated instance is already in the bandwidth package.                                                                    | The error message returned because the GA instance is already associated with a bandwidth plan.                                                                  |
| 400      | BandwidthIllegal.BandwidthPackage     | The bandwidth of the basic bandwidth package must be lower than or equal to the bandwidth of the cross-domain bandwidth package. | The error message returned because the bandwidth value of a basic bandwidth plan must not be greater than that of a bandwidth plan for cross-border connections. |

| HttpCode | Error code                                   | Error message                                                                 | Description                                                                                                                                  |
|----------|----------------------------------------------|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| 400      | BindExist.Accelerator                        | The accelerated instance is already bound to a bandwidth package.             | The error message returned because the specified GA instance is already associated with a bandwidth plan.                                    |
| 400      | BindExist.BandwidthPackage                   | The bandwidth package is already bound.                                       | The error message returned because the bandwidth plan is associated with a resource.                                                         |
| 400      | BindExist.EndpointGroup                      | The endpoint group %s contains binding.                                       | The error message returned because the endpoint group %s is associated with a resource.                                                      |
| 400      | EndPointGroupTypeIllegal.EndpointGroup       | The endpoint group type is illegal.                                           | The error message returned because the type of the endpoint group is invalid.                                                                |
| 400      | EndPointRequestProtocolIllegal.EndpointGroup | The endpoint group request protocol is illegal.                               | The error message returned because the endpoint uses an invalid request protocol.                                                            |
| 400      | Exist.EndpointGroup                          | The endpoint group already exists.                                            | The error message returned because the specified endpoint group already exists.                                                              |
| 400      | Exist.ForwardingRule                         | The forwarding rule already exists.                                           | The error message returned when the forwarding rule already exists.                                                                          |
| 400      | Exist.IpSet                                  | The IpSet already exists.                                                     | The error message returned because the specified accelerated IP address already exists.                                                      |
| 400      | Exist.Listener                               | The listener already exists.                                                  | The error message returned because the specified listener already exists.                                                                    |
| 400      | Exist.VirtualEndpointGroup                   | A virtual endpoint group already exists.                                      | The error message returned because specified virtual endpoint group already exists.                                                          |
| 400      | GaSpecExceeded.IpSet                         | The number of IpSet exceeds the specification of the GA instance.             | The error message returned because the number of accelerated IP addresses has reached the upper limit supported by the GA instance.          |
| 400      | GreaterThanGa.IpSetBandwidth                 | The total bandwidth for IpSet exceeds the total bandwidth of the GA instance. | The error message returned because the total bandwidth of accelerated IP addresses has reached the upper limit supported by the GA instance. |

| HttpCode | Error code                     | Error message                                      | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------|--------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 400      | IllegalBandwidth.IpSet         | The bandwidth of IpSet is invalid.                 | The error message returned because the bandwidth value of the accelerated IP address is invalid.                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 400      | IllegalParameter.BandwidthType | The parameter BandwidthType is illegal.            | The error message returned because the GA instance associated with a basic bandwidth plan has a non-EIP endpoint and You cannot change the bandwidth type of a basic bandwidth plan to Basic.                                                                                                                                                                                                                                                                                                                      |
| 400      | IllegalParameter.Spec          | The specified Spec is invalid.                     | The error message returned because Spec is set to an invalid value.                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 400      | IllegalParameter.Type          | The specified Type is invalid.                     | The error message returned because Type is set to an invalid value.                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 400      | MissingParameter.BandwidthType | You must specify BandwidthType.                    | The error message returned because BandwidthType is not set.                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 400      | NoPermission.EnableHealthCheck | You do not have permission to enable health check. | The error message returned because you are not authorized to enable the health check feature. You must apply for the required permissions.                                                                                                                                                                                                                                                                                                                                                                         |
| 400      | NoPermission.GaDdosRoleSession | You are not authorized to perform the operation.   | The error message returned because you are unauthorized to create the service-linked role. Contact the owner of the Alibaba Cloud account or the administrator to acquire the AliyunGlobalAccelerationFullAccess permission or the required custom permission. The service name of the custom permission must be set to ddos.ga.aliyuncs.com. The name of the service-linked role must be set to AliyunServiceRoleForGaAntiDDos. The ram:CreateServiceLinkedRole permission is required to perform the operations. |

| HttpCode | Error code                     | Error message                                    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------|--------------------------------|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 400      | NoPermission.VpcEndpoint       | You are not authorized to perform the operation. | The error message returned because you are unauthorized to create the service-linked role. Contact the owner of the Alibaba Cloud account or the administrator to acquire the <code>AliyunGlobalAccelerationFullAccess</code> permission or the required custom permission. The service name of the custom permission must be set to <code>vpcendpoint.ga.aliyuncs.com</code> . The name of the service-linked role must be set to <code>AliyunServiceRoleForGaVpcEndpoint</code> . The <code>ram:CreateServiceLinkedRole</code> permission is required to perform the operations. |
| 400      | NotActive.IpSet                | The state of IpSet is not active.                | The error message returned because the specified accelerated IP address is in an unstable state.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 400      | NotActive.Listener             | The state of the listener is not active.         | The error message returned because the specified listener is unstable.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 400      | NotExist.Accelerator           | The accelerated instance does not exist.         | The error message returned because the specified GA instance does not exist.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 400      | NotExist.BandwidthPackage      | The bandwidth package does not exist.            | The error message returned because the specified bandwidth plan does not exist.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 400      | NotExist.BasicBandwidthPackage | You must specify the basic bandwidth package.    | The error message returned because the required basic bandwidth plan is not specified.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 400      | NotExist.BusinessRegion        | The business region does not exist.              | The error message returned because the specified region does not exist.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 400      | NotExist.EndpointGroup         | The endpoint group does not exist.               | The error message returned because the specified endpoint group does not exist.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 400      | NotExist.IpSet                 | The IpSet does not exist.                        | The error message returned because the specified accelerated IP address does not exist.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

| HttpCode | Error code                        | Error message                                                | Description                                                                                                                       |
|----------|-----------------------------------|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| 400      | NotExist.IpSets                   | The IpSet does not exist.                                    | The error message returned because the specified accelerated IP address does not exist.                                           |
| 400      | NotExist.Listener                 | The listener does not exist.                                 | The error message returned because the specified listener does not exist.                                                         |
| 400      | NotExist.ListenerPort             | The listening port %s does not exist.                        | The error message returned because the specified listener port %s does not exist.                                                 |
| 400      | NotInBandwidthPackage.Accelerator | The accelerated instance is not in the bandwidth package.    | The error message returned because the GA instance is not associated with a bandwidth plan.                                       |
| 400      | PortConflict.Listener             | The listener port configuration is in conflict.              | The error message returned because the configuration of the specified listener port conflicts with that of another listener port. |
| 400      | PortRangeIllegal.Count            | The hugePort listener only supports one port range.          | The error message returned because you can specify only one port range for a listener that supports more than 300 ports.          |
| 400      | PortRangeIllegal.Listener         | The specified listener port range is invalid.                | The error message returned because the specified port range is invalid.                                                           |
| 400      | PortRanges.MustOne                | The portRanges must be one for HTTPS and HTTP type listener. | The error message returned because an HTTP or HTTPS listener supports only one port.                                              |
| 400      | ProtocolIllegal.Listener          | The specified listener protocol is invalid.                  | The error message returned because the protocol of the specified listener is invalid.                                             |
| 400      | QuotaExceeded.Endpoint            | The maximum number of endpoints is exceeded.                 | The error message returned because the number of endpoints has reached the upper limit.                                           |
| 400      | QuotaExceeded.ForwardingRule      | The number of forwarding rule exceeds the limit.             | The error message returned because the number of forwarding rules has reached the upper limit.                                    |
| 400      | QuotaExceeded.Listener            | The maximum number of listeners is exceeded.                 | The error message returned because the number of listeners has reached the upper limit.                                           |

| HttpCode | Error code                        | Error message                                              | Description                                                                                            |
|----------|-----------------------------------|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| 400      | QuotaExceeded.ListenerPort        | The maximum number of listener ports is exceeded.          | The error message returned because the number of listener ports has reached the upper limit.           |
| 400      | QuotaExceeded.PortOverride        | The number of port override exceeds the limit.             | The error message returned because the number of port forwarding times has reached the upper limit.    |
| 400      | QuotaExceeded.RuleConditionConfig | The number of path and host exceeds the limit.             | The error message returned because the numbers of paths and domain names have reached the upper limit. |
| 400      | RegionRepeat.IpSet                | Only one IpSet can be created in an accelerated region.    | The error message returned because an acceleration region supports only one accelerated IP address.    |
| 400      | Repeat.IpSets                     | The configuration of IpSet is duplicated.                  | The error message returned because duplicated accelerated IP addresses are specified.                  |
| 400      | RepeatPathAndHost.ForwardingRule  | The path and host %s are duplicated.                       | The error message returned because duplicated paths and domain names are specified.                    |
| 400      | StateError.Accelerator            | The state of the accelerated instance is invalid.          | The error message returned because the specified GA instance is in an invalid state.                   |
| 400      | StateError.BandwidthPackage       | The state of bandwidth package is invalid.                 | The error message returned because the specified bandwidth plan is in an invalid state.                |
| 400      | StateError.BandwidthPackageBind   | The state of binding for the bandwidth package is invalid. | The error message returned because the association status of the bandwidth plan is invalid.            |
| 400      | StateError.EndPointGroup          | The specified state of endpoint group is invalid.          | The error message returned because the specified endpoint group is in an invalid state.                |
| 400      | StateError.ForwardingRule         | The forwarding rule state %s is illegal.                   | The error message returned because the specified forwarding rule is in an invalid state.               |
| 400      | StateError.IpSet                  | The state of IpSet is invalid.                             | The error message returned because the specified accelerated IP address is in an invalid state.        |

| HttpCode | Error code                    | Error message                                                                         | Description                                                                                                                                                         |
|----------|-------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 400      | TooManySpareIpAccelerator     | Too many SpareIp accepted under the same Accelerator                                  | The error message returned because a large number of secondary IP addresses are configured for the current GA instance.                                             |
| 400      | UpgradeError.BandwidthPackage | The bandwidth package configurations should be either all upgrades or all downgrades. | The error message returned because you cannot upgrade and downgrade a bandwidth plan at the same time. You can only either upgrade or downgrade the bandwidth plan. |

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

## 8.9. ListListenerCertificates

Queries certificates associated with a listener.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

### Request parameters

| Parameter     | Type   | Required | Example                  | Description                                                                                                                                                                                                                                                                          |
|---------------|--------|----------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action        | String | Yes      | ListListenerCertificates | The operation that you want to perform. Set the value to <b>ListListenerCertificates</b> .                                                                                                                                                                                           |
| RegionId      | String | Yes      | cn-hangzhou              | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                   |
| AcceleratorId | String | Yes      | ga-bp1odcab8tmno0hdq**** | The ID of the GA instance.                                                                                                                                                                                                                                                           |
| Role          | String | No       | default                  | The type of the certificate. Valid values: <ul style="list-style-type: none"><li><b>default</b>: a default certificate</li><li><b>additional</b>: an additional certificate</li></ul> If you do not set this parameter, default and additional certificates are returned by default. |

| Parameter  | Type    | Required | Example                          | Description                                                                                                |
|------------|---------|----------|----------------------------------|------------------------------------------------------------------------------------------------------------|
| ListenerId | String  | Yes      | lsr-bp1bpn0kn908w4nbw****        | The ID of the listener.                                                                                    |
| NextToken  | String  | No       | caeba0bbb2be03f84eb48b699f0a4883 | The position where the query starts. If this parameter is left empty, the query starts from the beginning. |
| MaxResults | Integer | No       | 50                               | The number of entries to return.<br>Valid values: <b>1</b> to <b>50</b> . Default value: <b>20</b> .       |

## Response parameters

| Parameter     | Type                  | Example                              | Description                                                                                                                                                                            |
|---------------|-----------------------|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RequestId     | String                | 6FEA0CF3-D3B9-43E5-A304-D217037876A8 | The ID of the request.                                                                                                                                                                 |
| TotalCount    | Integer               | 1                                    | The total number of entries returned.                                                                                                                                                  |
| NextToken     | String                | caeba0bbb2be03f84eb48b699f0a4883     | The position where the query starts. If this parameter is left empty, the query starts from the beginning.                                                                             |
| MaxResults    | Integer               | 20                                   | The total number of entries returned.                                                                                                                                                  |
| Certificates  | Array of Certificates |                                      | The certificates.                                                                                                                                                                      |
| CertificateId | String                | 6092**-cn-hangzhou                   | The ID of the certificate.                                                                                                                                                             |
| IsDefault     | Boolean               | true                                 | Indicates whether the certificate is a default one: <ul style="list-style-type: none"><li><b>true</b>: a default certificate</li><li><b>false</b>: an additional certificate</li></ul> |
| Domain        | String                | example.com                          | The domain name associated with an additional certificate. This parameter is not returned if the certificate is a default one.                                                         |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=ListListenerCertificates
&RegionId=cn-hangzhou
&AcceleratorId=ga-bp1odcab8tmno0hdq****
&Role=default
&ListenerId=lsr-bp1bpn0kn908w4nbw****
&NextToken=caeba0bbb2be03f84eb48b699f0a4883
&MaxResults=50
&Common request parameters
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<ListListenerCertificatesResponse>
  <RequestId>6FEA0CF3-D3B9-43E5-A304-D217037876A8</RequestId>
  <TotalCount>1</TotalCount>
  <NextToken>caeba0bbb2be03f84eb48b699f0a4883</NextToken>
  <MaxResults>20</MaxResults>
  <Certificates>
    <CertificateId>6092**-cn-hangzhou</CertificateId>
    <IsDefault>true</IsDefault>
    <Domain>example.com</Domain>
  </Certificates>
</ListListenerCertificatesResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "6FEA0CF3-D3B9-43E5-A304-D217037876A8",
  "TotalCount": 1,
  "NextToken": "caeba0bbb2be03f84eb48b699f0a4883",
  "MaxResults": 20,
  "Certificates": [ {
    "CertificateId": "6092**-cn-hangzhou",
    "IsDefault": true,
    "Domain": "example.com"
  } ]
}
```

### Error codes

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

## 8.10. ListSystemSecurityPolicies

Queries the TLS security policies that are supported by HTTPS listeners.

### Description

You can select a TLS security policy when you create and modify an HTTPS listener. This API operation is used to query the TLS security policies that are supported by HTTPS listeners.

## Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

## Request parameters

| Parameter  | Type    | Required | Example                    | Description                                                                                                        |
|------------|---------|----------|----------------------------|--------------------------------------------------------------------------------------------------------------------|
| Action     | String  | Yes      | ListSystemSecurityPolicies | The operation that you want to perform. Set the value to <b>ListSystemSecurityPolicies</b> .                       |
| RegionId   | String  | No       | cn-hangzhou                | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> . |
| PageNumber | Integer | No       | 1                          | The number of the page to return. Default value: <b>1</b> .                                                        |
| PageSize   | Integer | No       | 10                         | The number of entries to return on each page. Maximum value: <b>100</b> . Default value: <b>10</b> .               |

## Response parameters

| Parameter        | Type                      | Example                              | Description                              |
|------------------|---------------------------|--------------------------------------|------------------------------------------|
| RequestId        | String                    | A9B4E54C-9CCD-4002-91A9-D38C6C209192 | The ID of the request.                   |
| TotalCount       | Integer                   | 2                                    | The total number of entries returned.    |
| PageSize         | Integer                   | 10                                   | The number of entries returned per page. |
| PageNumber       | Integer                   | 1                                    | The page number of the returned page.    |
| SecurityPolicies | Array of SecurityPolicies |                                      | The security policies.                   |
| SecurityPolicyId | String                    | tls_cipher_policy_1_1                | The ID of the security policy.           |

| Parameter   | Type            | Example                                                  | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------|-----------------|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TlsVersions | Array of String | ["TLSv1.0","TLSv1.2"]                                    | <p>The supported TLS protocol versions. Valid values: <b>TLSv1.0</b>, <b>TLSv1.1</b>, <b>TLSv1.2</b>, and <b>TLSv1.3</b>.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Ciphers     | Array of String | ["ECDHE-ECDSA-AES128-SHA","ECDHE-RSA-AES128-GCM-SHA256"] | <p>The supported cipher suites, which depend on the <b>TLSVersions</b> value.</p> <p>The specified cipher suites must be supported by at least one <b>TLS protocol version</b> that you select. For example, if you set the <b>TLSVersions.N</b> parameter to <b>TLSv1.3</b>, you can specify only cipher suites that are supported by <b>TLSv1.3</b>.</p> <ul style="list-style-type: none"> <li>• <b>TLSv1.0</b> and <b>TLSv1.1</b> support the following cipher suites: <ul style="list-style-type: none"> <li>◦ ECDHE-ECDSA-AES128-SHA</li> <li>◦ ECDHE-ECDSA-AES256-SHA</li> <li>◦ ECDHE-RSA-AES128-SHA</li> <li>◦ ECDHE-RSA-AES256-SHA</li> <li>◦ AES128-SHA</li> <li>◦ AES256-SHA</li> <li>◦ DES-CBC3-SHA</li> </ul> </li> <li>• <b>TLS 1.2</b> supports the following cipher suites: <ul style="list-style-type: none"> <li>◦ ECDHE-ECDSA-AES128-SHA</li> <li>◦ ECDHE-ECDSA-AES256-SHA</li> <li>◦ ECDHE-RSA-AES128-SHA</li> <li>◦ ECDHE-RSA-AES256-SHA</li> <li>◦ AES128-SHA</li> <li>◦ AES256-SHA</li> <li>◦ DES-CBC3-SHA</li> <li>◦ ECDHE-ECDSA-AES128-GCM-SHA256</li> <li>◦ ECDHE-ECDSA-AES256-GCM-SHA384</li> <li>◦ ECDHE-ECDSA-AES128-SHA256</li> <li>◦ ECDHE-ECDSA-AES256-SHA384</li> <li>◦ ECDHE-RSA-AES128-GCM-SHA256</li> <li>◦ ECDHE-RSA-AES256-GCM-SHA384</li> <li>◦ ECDHE-RSA-AES128-SHA256</li> <li>◦ ECDHE-RSA-AES256-SHA384</li> <li>◦ AES128-GCM-SHA256</li> <li>◦ AES256-GCM-SHA384</li> <li>◦ AES128-SHA256</li> <li>◦ AES256-SHA256</li> </ul> </li> </ul> |

| Parameter | Type | Example | <ul style="list-style-type: none"> <li>• <b>TLSv1.3</b> supports the following cipher suites:</li> </ul>                                                                                                                   |
|-----------|------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|           |      |         | <ul style="list-style-type: none"> <li>◦ TLS_AES_128_GCM_SHA256</li> <li>◦ TLS_AES_256_GCM_SHA384</li> <li>◦ TLS_CHACHA20_POLY1305_SHA256</li> <li>◦ TLS_AES_128_CCM_SHA256</li> <li>◦ TLS_AES_128_CCM_8_SHA256</li> </ul> |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=ListSystemSecurityPolicies
&RegionId=cn-hangzhou
&PageNumber=1
&PageSize=10
&Common request parameters
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<ListSystemSecurityPoliciesResponse>
  <RequestId>A9B4E54C-9CCD-4002-91A9-D38C6C209192</RequestId>
  <TotalCount>2</TotalCount>
  <PageSize>10</PageSize>
  <PageNumber>1</PageNumber>
  <SecurityPolicies>
    <SecurityPolicyId>tls_cipher_policy_1_1</SecurityPolicyId>
    <TlsVersions>["TLSv1.0","TLSv1.2"]</TlsVersions>
    <Ciphers>["ECDHE-ECDSA-AES128-SHA","ECDHE-RSA-AES128-GCM-SHA256"]</Ciphers>
  </SecurityPolicies>
</ListSystemSecurityPoliciesResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "A9B4E54C-9CCD-4002-91A9-D38C6C209192",
  "TotalCount": 2,
  "PageSize": 10,
  "PageNumber": 1,
  "SecurityPolicies": [ {
    "SecurityPolicyId": "tls_cipher_policy_1_1",
    "TlsVersions": [ "\TLSv1.0\","\TLSv1.2\""],
    "Ciphers": [ "\ECDHE-ECDSA-AES128-SHA\","\ECDHE-RSA-AES128-GCM-SHA256\""] ]
  }
}
```

---

## Error codes

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

# 9.Endpoint groups

## 9.1. CreateEndpointGroup

Creates an endpoint group.

### Debugging

Alibaba Cloud provides OpenAPI Explorer to simplify API usage. OpenAPI Explorer automatically calculates signature values. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

### Request parameters

| Parameter           | Type   | Required | Example                              | Description                                                                                                                                                                                                                                                                |
|---------------------|--------|----------|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action              | String | Yes      | CreateEndpointGroup                  | The operation that you want to perform. Set the value to <b>CreateEndpointGroup</b> .                                                                                                                                                                                      |
| RegionId            | String | Yes      | cn-hangzhou                          | The ID of the region where your Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                        |
| ClientToken         | String | No       | 123e4567-e89b-12d3-a456-426655440000 | The client token that is used to ensure the idempotence of the request.<br><br>You can use your client to generate a token. Make sure that you use a unique token for each request. The token can contain only ASCII characters and cannot exceed 64 characters in length. |
| AcceleratorId       | String | Yes      | ga-bp1odcab8tmno0hdq****             | The ID of the GA instance.                                                                                                                                                                                                                                                 |
| Name                | String | No       | group1                               | The name of the endpoint group.<br><br>The name must be 2 to 128 characters in length and can contain letters, digits, underscores (_), and hyphens (-). The name must start with a letter.                                                                                |
| Description         | String | No       | EndpointGroup                        | The description of the endpoint group.                                                                                                                                                                                                                                     |
| EndpointGroupRegion | String | Yes      | cn-hangzhou                          | The ID of the region where the endpoint group is deployed.                                                                                                                                                                                                                 |

| Parameter                  | Type    | Required | Example                   | Description                                                                                                                                                                    |
|----------------------------|---------|----------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ListenerId                 | String  | Yes      | lsr-bp1bpn0kn908w4nbw**** | The ID of the listener that is associated with the endpoint group.                                                                                                             |
| TrafficPercentage          | Integer | No       | 20                        | The weight of the endpoint group. If the specified listener is associated with multiple endpoint groups, you must specify the weight of the current endpoint group.            |
| HealthCheckIntervalSeconds | Integer | No       | 3                         | The interval at which health checks are performed. Unit: seconds.                                                                                                              |
| HealthCheckPath            | String  | No       | /healthcheck              | The path on which health checks run.                                                                                                                                           |
| HealthCheckPort            | Integer | No       | 20                        | The port that is used for health checks.                                                                                                                                       |
| HealthCheckProtocol        | String  | No       | tcp                       | The protocol that is used for health checks. Valid values: <ul style="list-style-type: none"> <li>• tcp</li> <li>• http</li> <li>• https</li> </ul>                            |
| ThresholdCount             | Integer | No       | 3                         | The threshold of consecutive failed health checks. If the number of consecutive failed health checks exceeds the specified value, the system considers the endpoint unhealthy. |

| Parameter               | Type    | Required | Example | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------|---------|----------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EndpointRequestProtocol | String  | No       | HTTP    | <p>The protocol that is used by the backend service. Valid values:</p> <ul style="list-style-type: none"> <li><b>HTTP</b>: This is the default value.</li> <li><b>HTTPS</b></li> </ul> <div> <p> <b>Note</b></p> <ul style="list-style-type: none"> <li>You can configure this parameter only when the listener that is associated with the endpoint group uses the HTTP or HTTPS protocol.</li> <li>An HTTP listener supports only HTTP as the backend service protocol.</li> </ul> </div> |
| EndpointGroupType       | String  | No       | default | <p>The type of the endpoint group. Valid values:</p> <ul style="list-style-type: none"> <li><b>default</b>: The endpoint group is a default endpoint group. This is the default value.</li> <li><b>virtual</b>: The endpoint group is a virtual endpoint group.</li> </ul> <div> <p> <b>Note</b> Only HTTP and HTTPS listeners support virtual endpoint groups.</p> </div>                                                                                                                |
| HealthCheckEnabled      | Boolean | No       | true    | <p>Specifies whether to enable the health check feature. Valid values:</p> <ul style="list-style-type: none"> <li><b>true</b>: enables the health check feature. This is the default value.</li> <li><b>false</b>: disables the health check feature.</li> </ul>                                                                                                                                                                                                                                                                                                              |

| Parameter                                           | Type    | Required | Example      | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------------------------|---------|----------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EndpointConfigurations.N.Type                       | String  | Yes      | Ip           | <p>The type of the endpoint. Valid values:</p> <ul style="list-style-type: none"> <li><b>Domain</b>: a custom domain name</li> <li><b>Ip</b>: a custom IP address</li> <li><b>PublicIp</b>: an Alibaba Cloud public IP address</li> <li><b>ECS</b>: an Alibaba Cloud Elastic Compute Service (ECS) instance</li> <li><b>SLB</b>: an Alibaba Cloud Server Load Balancer (SLB) instance</li> </ul> <div>  <b>Note</b> If you set this parameter to <b>ECS</b> or <b>SLB</b> and the service-linked role does not exist, the system automatically creates a service-linked role named <code>AliyunServiceRoleForGaVpcEndpoint</code>. For more information, see <a href="#">AliyunServiceRoleForGaVpcEndpoint</a>. </div> |
| EndpointConfigurations.N.EnableClientIPPreservation | Boolean | No       | false        | <p>Specifies whether to obtain and preserve the IP addresses of clients that access the endpoint by using the TCP Option Address (TOA) module. Valid values:</p> <ul style="list-style-type: none"> <li><b>true</b>: enables the client IP address preservation feature.</li> <li><b>false</b>: disables the client IP address preservation feature. This is the default value.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                               |
| EndpointConfigurations.N.Weight                     | Integer | Yes      | 20           | <p>The weight of the endpoint.</p> <p>Valid values: <b>0</b> to <b>255</b>.</p> <div>  <b>Note</b> If you set the weight of an endpoint to <b>0</b>, GA does not route network traffic to the endpoint. Make sure that you are fully aware of the impact on your business before you set the endpoint weight to <b>0</b>. </div>                                                                                                                                                                                                                                                                                                                                                                                     |
| EndpointConfigurations.N.Endpoint                   | String  | Yes      | 120.XX.XX.21 | The IP address or domain name of the endpoint.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

| Parameter                    | Type    | Required | Example | Description                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------|---------|----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PortOverrides.N.ListenerPort | Integer | No       | 443     | <p>The listening port for port mapping.</p> <div><p> <b>Note</b></p><ul style="list-style-type: none"><li>• Only HTTP and HTTPS listeners support port mapping.</li><li>• The listening port configured for port mapping must be the same as the port used by the current listener.</li></ul></div> |
| PortOverrides.N.EndpointPort | Integer | No       | 80      | The endpoint port for port mapping.                                                                                                                                                                                                                                                                                                                                                   |

## Response parameters

| Parameter       | Type   | Example                              | Description                   |
|-----------------|--------|--------------------------------------|-------------------------------|
| EndpointGroupId | String | epg-bp1dmlohjjz4kqaun***             | The ID of the endpoint group. |
| RequestId       | String | 04F0F334-1335-436C-A1D7-6C044FE73368 | The ID of the request.        |

## Examples

### Sample requests

```

http(s)://[Endpoint]/?Action=CreateEndpointGroup
&RegionId=cn-hangzhou
&ClientToken=123e4567-e89b-12d3-a456-426655440000
&AcceleratorId=ga-bp1odcab8tmno0hdq****
&Name=group1
&Description=EndpointGroup
&EndpointGroupRegion=cn-hangzhou
&ListenerId=lsr-bp1bpn0kn908w4nbw****
&TrafficPercentage=20
&HealthCheckIntervalSeconds=3
&HealthCheckPath=/healthcheck
&HealthCheckPort=20
&HealthCheckProtocol=tcp
&ThresholdCount=3
&EndpointConfigurations=[{"Type":"Ip","EnableClientIPPreservation":false,"Weight":20,"Endpoint":"120.XX.X
X.21"}]
&EndpointRequestProtocol=HTTP
&EndpointGroupType=default
&PortOverrides=[{"ListenerPort":443,"EndpointPort":80}]
&HealthCheckEnabled=true
&<Common request parameters>

```

#### Sample success responses

##### XML format

```

HTTP/1.1 200 OK
Content-Type:application/xml
<CreateEndpointGroupResponse>
  <EndpointGroupId>epg-bp1dmlhjz4kqaun****</EndpointGroupId>
  <RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
</CreateEndpointGroupResponse>

```

##### JSON format

```

HTTP/1.1 200 OK
Content-Type:application/json
{
  "EndpointGroupId": "epg-bp1dmlhjz4kqaun****",
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368"
}

```

## Error codes

| HTTP status code | Error code            | Error message                         | Description                                                          |
|------------------|-----------------------|---------------------------------------|----------------------------------------------------------------------|
| 400              | NotExist.ListenerPort | The listening port %s does not exist. | The error message returned because listening port %s does not exist. |

| HTTP status code | Error code                     | Error message                                      | Description                                                                                                                                 |
|------------------|--------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| 400              | NoPermission.EnableHealthCheck | You do not have permission to enable health check. | The error message returned because you are not authorized to enable the health check feature. Submit a ticket to apply for the permissions. |
| 400              | NotExist.Listener              | The listener does not exist.                       | The error message returned because the specified listener does not exist.                                                                   |
| 400              | NotActive.Listener             | The state of the listener is not active.           | The error message returned because the specified listener is in an unstable status.                                                         |
| 400              | NotExist.Accelerator           | The accelerated instance does not exist.           | The error message returned because the specified GA instance does not exist.                                                                |
| 400              | StateError.Accelerator         | The state of the accelerated instance is invalid.  | The error message returned because the specified GA instance is in an invalid status.                                                       |
| 400              | NotExist.BusinessRegion        | The specified region does not exist.               | The error message returned because the specified region does not exist.                                                                     |
| 400              | NotExist.BasicBandwidthPackage | You must specify the basic bandwidth package.      | The error message returned because no basic bandwidth plan are bound to the GA instance.                                                    |
| 400              | QuotaExceeded.Endpoint         | The maximum number of endpoints is exceeded.       | The error message returned because the number of endpoints has reached the upper limit.                                                     |
| 400              | Exist.EndpointGroup            | The endpoint group already exists.                 | The error message returned because the specified endpoint group already exists.                                                             |

| HTTP status code | Error code                 | Error message                                    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------|----------------------------|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 400              | NoPermission.VpcEndpoint   | You are not authorized to perform the operation. | The error message returned because you are not authorized to create the service-linked role. Contact the owner of the Alibaba Cloud account or the account administrator to grant the current user the AliyunGlobalAccelerationFullAccess permission or custom permissions that allow the current user to create the service-linked role. A custom permission policy contains the following information: 1. service name: vpcendpoint.ga.aliyuncs.com. 2. service-linked role: AliyunServiceRoleForGaVpcEndpoint. 3. required permissions: ram:CreateServiceLinkedRole. |
| 400              | QuotaExceeded.PortOverride | The number of port override exceeds the limit.   | The error message returned because the number of port overrides has reached the upper limit.                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

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

## 9.2. DescribeEndpointGroup

Queries the information about a specified endpoint group.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

### Request parameters

| Parameter | Type   | Required | Example               | Description                                                                                                         |
|-----------|--------|----------|-----------------------|---------------------------------------------------------------------------------------------------------------------|
| Action    | String | Yes      | DescribeEndpointGroup | The operation that you want to perform. Set the value to <b>DescribeEndpointGroup</b> .                             |
| RegionId  | String | Yes      | cn-hangzhou           | The ID of the region where your Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> . |

| Parameter       | Type   | Required | Example                   | Description                                          |
|-----------------|--------|----------|---------------------------|------------------------------------------------------|
| EndpointGroupId | String | Yes      | epg-bp14sz7ftcwwjgrdm**** | The ID of the endpoint group that you want to query. |

## Response parameters

| Parameter                      | Type            | Example                              | Description                                                                                                                                                                    |
|--------------------------------|-----------------|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HealthCheckIntervalSeconds     | Integer         | 3                                    | The time interval between two consecutive health checks. Unit: seconds.                                                                                                        |
| TrafficPercentage              | Integer         | 20                                   | The weight of the endpoint group. If the listener is associated with multiple endpoint groups, this parameter indicates the weight of the current endpoint group.              |
| EndpointGroupId                | String          | epg-bp14sz7ftcwwjgrdm****            | The ID of the endpoint group.                                                                                                                                                  |
| Description                    | String          | group1                               | The description of the endpoint group.                                                                                                                                         |
| EndpointGroupIpList            | Array of String | 101.XX.XX.22                         | The IP addresses in the endpoint group.                                                                                                                                        |
| EndpointGroupUnconfirmedIpList | Array of String | 101.XX.XX.22                         | The IP addresses to be confirmed. After the GA instance is upgraded, the IP addresses that are added to the endpoint group need to be confirmed.                               |
| RequestId                      | String          | 6FEA0CF3-D3B9-43E5-A304-D217037876A8 | The ID of the request.                                                                                                                                                         |
| HealthCheckPath                | String          | /healthcheck                         | The path to which health check requests are sent.                                                                                                                              |
| ThresholdCount                 | Integer         | 3                                    | The threshold of consecutive failed health checks. If the number of consecutive failed health checks exceeds the specified value, the system considers the endpoint unhealthy. |
| Name                           | String          | group1                               | The name of the endpoint group.                                                                                                                                                |

| Parameter              | Type                            | Example     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------|---------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EndpointGroupRegion    | String                          | cn-hangzhou | The ID of the region where the endpoint group is deployed.                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| TotalCount             | Integer                         | 10          | The total number of entries.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| State                  | String                          | active      | <p>The status of the endpoint group. Valid values:</p> <ul style="list-style-type: none"> <li><b>init</b>: The endpoint group is being initialized.</li> <li><b>active</b>: The endpoint group is running.</li> <li><b>creating</b>: The endpoint group is being created.</li> <li><b>configuring</b>: The endpoint group is being configured.</li> </ul>                                                                                                                                                   |
| HealthCheckProtocol    | String                          | tcp         | <p>The protocol over which health check requests are sent. Valid values:</p> <ul style="list-style-type: none"> <li><b>tcp</b>: TCP</li> <li><b>http</b>: HTTP</li> <li><b>https</b>: HTTPS</li> </ul>                                                                                                                                                                                                                                                                                                      |
| HealthCheckPort        | Integer                         | 20          | The port used for health checks.                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| EndpointConfigurations | Array of EndpointConfigurations |             | The configurations of endpoints in the endpoint group.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Type                   | String                          | ip          | <p>The type of the endpoint. Valid values:</p> <ul style="list-style-type: none"> <li><b>Domain</b>: a custom domain name</li> <li><b>Ip</b>: a custom IP address</li> <li><b>PublicIp</b>: a public IP address provided by Alibaba Cloud</li> <li><b>ECS</b>: an Elastic Compute Service (ECS) instance</li> <li><b>SLB</b>: a Server Load Balancer (SLB) instance</li> <li><b>ALB</b>: an Application Load Balancer (ALB) instance</li> <li><b>OSS</b>: an Object Storage Service (OSS) bucket</li> </ul> |

| Parameter                  | Type                   | Example                   | Description                                                                                                                                                                                                                                                                                 |
|----------------------------|------------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EnableClientIPPreservation | Boolean                | false                     | Indicates whether the client IP address preservation feature is enabled. Valid values: <ul style="list-style-type: none"> <li><b>true</b>: The client IP address preservation feature is enabled.</li> <li><b>false</b>: The client IP address preservation feature is disabled.</li> </ul> |
| Weight                     | Integer                | 20                        | The weight of the endpoint.                                                                                                                                                                                                                                                                 |
| ProbeProtocol              | String                 | tcp                       | The protocol that is used to monitor the network latency. <ul style="list-style-type: none"> <li><b>tcp</b>: TCP</li> <li><b>icmp</b>: ICMP</li> </ul>                                                                                                                                      |
| Endpoint                   | String                 | 120.XX.XX.21              | The IP address or domain name of the endpoint.                                                                                                                                                                                                                                              |
| ProbePort                  | Integer                | 80                        | The port that is used to monitor network latency.                                                                                                                                                                                                                                           |
| PortOverrides              | Array of PortOverrides |                           | The mappings between ports.                                                                                                                                                                                                                                                                 |
| ListenerPort               | Integer                | 443                       | The port that is used by the listener.                                                                                                                                                                                                                                                      |
| EndpointPort               | Integer                | 80                        | The port that is used by the endpoint.                                                                                                                                                                                                                                                      |
| EndpointRequestProtocol    | String                 | HTTP                      | The protocol that is used by the backend service. <ul style="list-style-type: none"> <li><b>HTTP</b></li> <li><b>HTTPS</b></li> </ul>                                                                                                                                                       |
| EndpointGroupType          | String                 | default                   | The type of the endpoint group. Valid values: <ul style="list-style-type: none"> <li><b>default</b>: a default endpoint group</li> <li><b>virtual</b>: a virtual endpoint group</li> </ul>                                                                                                  |
| ForwardingRules            | Array of String        | frule-bp19a3t3yzr21q3**** | The ID of the forwarding rule that is associated with the endpoint group.                                                                                                                                                                                                                   |
| AcceleratorId              | String                 | ga-bp1odcab8tmno0hdq****  | The ID of the GA instance.                                                                                                                                                                                                                                                                  |

| Parameter          | Type    | Example                   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------|---------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ListenerId         | String  | lsr-bp1bpn0kn908w4nbw**** | The ID of the listener that is associated with the endpoint group.                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| SlsRegion          | String  | cn-hangzhou               | The region of the Log Service project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| SlsProjectName     | String  | pn-01                     | The name of the Log Service project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| SlsLogStoreName    | String  | lsn-01                    | The name of the Logstore.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| AccessLogSwitch    | String  | on                        | <p>Indicates whether the Log Service project is associated with the endpoint group.</p> <ul style="list-style-type: none"> <li>• <b>on</b>: The Log Service project associated with the endpoint group.</li> <li>• <b>off</b>: The Log Service project is not associated with the endpoint group.</li> <li>• <b>binding</b>: The Log Service project is being associated with the endpoint group.</li> <li>• <b>unbinding</b>: The Log Service project is being disassociated from the endpoint group.</li> </ul> |
| EnableAccessLog    | Boolean | on                        | <p>Indicates whether access logs are enabled.</p> <ul style="list-style-type: none"> <li>• <b>on</b>: yes</li> <li>• <b>off</b>: no</li> </ul>                                                                                                                                                                                                                                                                                                                                                                    |
| HealthCheckEnabled | Boolean | true                      | <p>Indicates whether health checks are enabled.</p> <ul style="list-style-type: none"> <li>• <b>true</b>: yes</li> <li>• <b>false</b>: no</li> </ul>                                                                                                                                                                                                                                                                                                                                                              |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=DescribeEndpointGroup
&RegionId=cn-hangzhou
&EndpointGroupId=epg-bp14sz7ftcwwjgrdm****
&Common request parameters
```

### Sample success responses

**XML** format

```

HTTP/1.1 200 OK
Content-Type:application/xml
<DescribeEndpointGroupResponse>
  <HealthCheckIntervalSeconds>3</HealthCheckIntervalSeconds>
  <TrafficPercentage>20</TrafficPercentage>
  <EndpointGroupId>epg-bp14sz7ftcwwjgrdm****</EndpointGroupId>
  <Description>group1</Description>
  <EndpointGroupIpList>101.XX.XX.22</EndpointGroupIpList>
  <EndpointGroupUnconfirmedIpList>101.XX.XX.22</EndpointGroupUnconfirmedIpList>
  <RequestId>6FEA0CF3-D3B9-43E5-A304-D217037876A8 </RequestId>
  <HealthCheckPath>/healthcheck</HealthCheckPath>
  <ThresholdCount>3</ThresholdCount>
  <Name>group1</Name>
  <EndpointGroupRegion>cn-hangzhou</EndpointGroupRegion>
  <TotalCount>10</TotalCount>
  <State>active</State>
  <HealthCheckProtocol>tcp</HealthCheckProtocol>
  <HealthCheckPort>20</HealthCheckPort>
  <EndpointConfigurations>
    <Type>Ip</Type>
    <EnableClientIPPreservation>>false</EnableClientIPPreservation>
    <Weight>20</Weight>
    <ProbeProtocol>tcp</ProbeProtocol>
    <Endpoint>120.XX.XX.21</Endpoint>
    <ProbePort>80</ProbePort>
  </EndpointConfigurations>
  <PortOverrides>
    <ListenerPort>443</ListenerPort>
    <EndpointPort>80</EndpointPort>
  </PortOverrides>
  <EndpointRequestProtocol>HTTP</EndpointRequestProtocol>
  <EndpointGroupType>default</EndpointGroupType>
  <ForwardingRuleIds>frule-bp19a3t3yzt21q3****</ForwardingRuleIds>
  <AcceleratorId>ga-bp1odcab8tmno0hdq****</AcceleratorId>
  <ListenerId>lsr-bp1bpn0kn908w4nbw****</ListenerId>
  <SlsRegion>cn-hangzhou</SlsRegion>
  <SlsProjectName>pn-01</SlsProjectName>
  <SlsLogStoreName>lsn-01</SlsLogStoreName>
  <AccessLogSwitch>on</AccessLogSwitch>
  <EnableAccessLog>>false</EnableAccessLog>
  <HealthCheckEnabled>>false</HealthCheckEnabled>
</DescribeEndpointGroupResponse>

```

JSON format

```

HTTP/1.1 200 OK
Content-Type:application/json
{
  "HealthCheckIntervalSeconds": 3,
  "TrafficPercentage": 20,
  "EndpointGroupId": "epg-bp14sz7ftcwwjgrdm****",
  "Description": "group1",
  "EndpointGroupIpList": [ "101.XX.XX.22" ],
  "EndpointGroupUnconfirmedIpList": [ "101.XX.XX.22" ],
  "RequestId": "6FEA0CF3-D3B9-43E5-A304-D217037876A8\t",
  "HealthCheckPath": "/healthcheck",
  "ThresholdCount": 3,
  "Name": "group1",
  "EndpointGroupRegion": "cn-hangzhou",
  "TotalCount": 10,
  "State": "active",
  "HealthCheckProtocol": "tcp",
  "HealthCheckPort": 20,
  "EndpointConfigurations": [ {
    "Type": "Ip",
    "EnableClientIPPreservation": false,
    "Weight": 20,
    "ProbeProtocol": "tcp",
    "Endpoint": "120.XX.XX.21",
    "ProbePort": 80
  } ],
  "PortOverrides": [ {
    "ListenerPort": 443,
    "EndpointPort": 80
  } ],
  "EndpointRequestProtocol": "HTTP",
  "EndpointGroupType": "default",
  "ForwardingRuleIds": [ "frule-bp19a3t3yzt21q3****" ],
  "AcceleratorId": "ga-bp1odcab8tmno0hdq****",
  "ListenerId": "lsr-bp1bpn0kn908w4nbw****",
  "SlsRegion": "cn-hangzhou",
  "SlsProjectName": "pn-01",
  "SlsLogStoreName": "lsn-01",
  "AccessLogSwitch": "on",
  "EnableAccessLog": false,
  "HealthCheckEnabled": false
}

```

## Errors

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

## 9.3. ListEndpointGroups

Queries endpoint groups.

## Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

## Request parameters

| Parameter         | Type    | Required | Example                   | Description                                                                                                                                                                                                                                                                                 |
|-------------------|---------|----------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action            | String  | Yes      | ListEndpointGroups        | The operation that you want to perform. Set the value to <b>ListEndpointGroups</b> .                                                                                                                                                                                                        |
| RegionId          | String  | Yes      | cn-hangzhou               | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                          |
| PageNumber        | Integer | No       | 1                         | The number of the page to return. Default value: 1.                                                                                                                                                                                                                                         |
| PageSize          | Integer | No       | 10                        | The number of entries to return on each page. Maximum value: 50. Default value: 10.                                                                                                                                                                                                         |
| AcceleratorId     | String  | Yes      | ga-bp1odcab8tmno0hdq****  | The ID of the GA instance.                                                                                                                                                                                                                                                                  |
| ListenerId        | String  | No       | lsr-bp1bpn0kn908w4nbw**** | The ID of the listener.                                                                                                                                                                                                                                                                     |
| EndpointGroupType | String  | No       | virtual                   | The type of the endpoint group. Valid values: <ul style="list-style-type: none"> <li><b>default</b>: a default endpoint group</li> <li><b>virtual</b>: a virtual endpoint group</li> <li>If you leave this parameter empty, all default and virtual endpoint groups are queried.</li> </ul> |
| AccessLogSwitch   | String  | No       | on                        | Specifies whether to enable the access logging feature. Valid values: <ul style="list-style-type: none"> <li><b>on</b>: enables the access logging feature.</li> <li><b>off</b>: disables the access logging feature. Default value: off.</li> </ul>                                        |
| EndpointGroupId   | String  | No       | epg-bp16jdc00bhe97sr5**** | The ID of the endpoint group.                                                                                                                                                                                                                                                               |

## Response parameters

| Parameter                      | Type                    | Example                              | Description                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------|-------------------------|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TotalCount                     | Integer                 | 10                                   | The total number of entries returned.                                                                                                                                                                                                                                                                                                                    |
| PageSize                       | Integer                 | 10                                   | The number of entries returned per page.                                                                                                                                                                                                                                                                                                                 |
| RequestId                      | String                  | A052D49E-CCC2-41DB-816C-DC3381503194 | The ID of the request.                                                                                                                                                                                                                                                                                                                                   |
| PageNumber                     | Integer                 | 1                                    | The page number of the returned page.                                                                                                                                                                                                                                                                                                                    |
| EndpointGroups                 | Array of EndpointGroups |                                      | The configuration of the endpoint groups.                                                                                                                                                                                                                                                                                                                |
| EndpointGroupId                | String                  | epg-bp16jdc00bhe97sr5**<br>**        | The ID of the endpoint group.                                                                                                                                                                                                                                                                                                                            |
| EndpointGroupIpList            | Array of String         | 101.xx.xx.22                         | The acceleration areas.                                                                                                                                                                                                                                                                                                                                  |
| EndpointGroupUnconfirmedIpList | Array of String         | 101.xx.xx.22                         | The IP addresses for the endpoint group. You need to confirm these IP addresses after the GA instance is upgraded.                                                                                                                                                                                                                                       |
| State                          | String                  | active                               | <p>The status of the endpoint group. Valid values:</p> <ul style="list-style-type: none"> <li><b>init</b>: The endpoint group is being initialized.</li> <li><b>active</b>: The endpoint group is normal.</li> <li><b>creating</b>: The endpoint group is being created.</li> <li><b>configuring</b>: The endpoint group is being configured.</li> </ul> |
| HealthCheckPath                | String                  | /healthcheck                         | The health check path.                                                                                                                                                                                                                                                                                                                                   |
| EndpointGroupRegion            | String                  | cn-hangzhou                          | The ID of the region where the endpoint group is deployed.                                                                                                                                                                                                                                                                                               |
| HealthCheckIntervalSeconds     | Integer                 | 3                                    | The time interval between two consecutive health checks. Unit: seconds.                                                                                                                                                                                                                                                                                  |

| Parameter                  | Type                            | Example                   | Description                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------|---------------------------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TrafficPercentage          | Integer                         | 20                        | The weight of the listener when the listener is associated with multiple endpoint groups.                                                                                                                                                                                                                                                                                         |
| HealthCheckProtocol        | String                          | tcp                       | The protocol that is used for health checks.<br>Valid values: <ul style="list-style-type: none"> <li>• <b>tcp</b></li> <li>• <b>http</b></li> <li>• <b>https</b></li> </ul>                                                                                                                                                                                                       |
| ThresholdCount             | Integer                         | 3                         | The threshold of consecutive failed health checks. If the number of consecutive failed health checks for an endpoint exceeds this value, the endpoint is considered unhealthy.                                                                                                                                                                                                    |
| ListenerId                 | String                          | lsr-bp1bpn0kn908w4nbw**** | The ID of the listener.                                                                                                                                                                                                                                                                                                                                                           |
| AcceleratorId              | String                          | ga-bp1odcab8tmno0hdq****  | The ID of the GA instance.                                                                                                                                                                                                                                                                                                                                                        |
| EndpointConfigurations     | Array of EndpointConfigurations |                           | The configuration of the endpoints.                                                                                                                                                                                                                                                                                                                                               |
| Type                       | String                          | ip                        | The type of the endpoint. Valid values: <ul style="list-style-type: none"> <li>• <b>Domain</b>: a custom domain name</li> <li>• <b>Ip</b>: a custom IP address</li> <li>• <b>PublicIp</b>: a public IP address provided by Alibaba Cloud</li> <li>• <b>ECS</b>: an Elastic Compute Service (ECS) instance</li> <li>• <b>SLB</b>: a Server Load Balancer (SLB) instance</li> </ul> |
| EnableClientIPPreservation | Boolean                         | false                     | Indicates whether client IP addresses are reserved. Valid values: <ul style="list-style-type: none"> <li>• <b>true</b>: Client IP addresses are reserved.</li> <li>• <b>false</b>: Client IP addresses are not reserved.</li> </ul>                                                                                                                                               |
| Weight                     | Integer                         | 20                        | The weight of the endpoint.                                                                                                                                                                                                                                                                                                                                                       |

| Parameter               | Type                   | Example                   | Description                                                                                                                                                                                |
|-------------------------|------------------------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ProbeProtocol           | String                 | tcp                       | The protocol that is used to monitor the network latency. Valid values: <ul style="list-style-type: none"> <li><b>icmp</b></li> <li><b>tcp</b></li> </ul>                                  |
| Endpoint                | String                 | 120.xx.xx.21              | The IP address or domain name of the endpoint.                                                                                                                                             |
| ProbePort               | Integer                | 80                        | The port that is used to monitor the network latency.                                                                                                                                      |
| EndpointId              | String                 | ep-bp1d2utp8qqe2a44t3qeq  | The ID of the endpoint.                                                                                                                                                                    |
| PortOverrides           | Array of PortOverrides |                           | The mappings between ports.                                                                                                                                                                |
| ListenerPort            | Integer                | 443                       | The listening port.                                                                                                                                                                        |
| EndpointPort            | Integer                | 80                        | The port that is used by the endpoint.                                                                                                                                                     |
| ForwardingRuleIds       | Array of String        | frule-bp19a3t3yzr21q3**** | The ID of the forwarding rule that is associated with the endpoint group.                                                                                                                  |
| EndpointGroupType       | String                 | default                   | The type of the endpoint group. Valid values: <ul style="list-style-type: none"> <li><b>default</b>: a default endpoint group</li> <li><b>virtual</b>: a virtual endpoint group</li> </ul> |
| EndpointRequestProtocol | String                 | HTTP                      | The protocol that is used by the backend server. Valid values: <ul style="list-style-type: none"> <li><b>HTTP</b></li> <li><b>HTTPS</b></li> </ul>                                         |
| Description             | String                 | group1                    | The description of the endpoint group.                                                                                                                                                     |
| Name                    | String                 | group1                    | The name of the endpoint group.                                                                                                                                                            |
| HealthCheckPort         | Integer                | 10                        | The port that is used for health checks.                                                                                                                                                   |

| Parameter          | Type    | Example | Description                                                                                                                                                                                                                                                        |
|--------------------|---------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HealthCheckEnabled | Boolean | true    | <p>Indicates whether the health check feature is enabled. Valid values:</p> <ul style="list-style-type: none"><li>• <b>true</b>: The health check feature is enabled. Default value: true.</li><li>• <b>false</b>: The health check feature is disabled.</li></ul> |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=ListEndpointGroups
&RegionId=cn-hangzhou
&PageNumber=1
&PageSize=10
&AcceleratorId=ga-bp1odcab8tmno0hdq****
&ListenerId=lsr-bp1bpn0kn908w4nbw****
&EndpointGroupType=virtual
&AccessLogSwitch=on
&EndpointGroupId=epg-bp16jdc00bhe97sr5****
&<Common request parameters>
```

### Sample success responses

XML format

```

HTTP/1.1 200 OK
Content-Type:application/xml
<ListEndpointGroupsResponse>
  <TotalCount>10</TotalCount>
  <PageSize>10</PageSize>
  <RequestId>A052D49E-CCC2-41DB-816C-DC3381503194 </RequestId>
  <PageNumber>1</PageNumber>
  <EndpointGroups>
    <EndpointGroupId>epg-bp16jdc00bhe97sr5****</EndpointGroupId>
    <EndpointGroupIpList>101.XX.XX.22</EndpointGroupIpList>
    <EndpointGroupUnconfirmedIpList>101.XX.XX.22</EndpointGroupUnconfirmedIpList>
    <State>active</State>
    <HealthCheckPath>/healthcheck</HealthCheckPath>
    <EndpointGroupRegion>cn-hangzhou</EndpointGroupRegion>
    <HealthCheckIntervalSeconds>3</HealthCheckIntervalSeconds>
    <TrafficPercentage>20</TrafficPercentage>
    <HealthCheckProtocol>tcp</HealthCheckProtocol>
    <ThresholdCount>3</ThresholdCount>
    <ListenerId>lsr-bp1bpn0kn908w4nbw****</ListenerId>
    <AcceleratorId>ga-bp1odcab8tmno0hdq****</AcceleratorId>
    <EndpointConfigurations>
      <Type>ip</Type>
      <EnableClientIPPreservation>>false</EnableClientIPPreservation>
      <Weight>20</Weight>
      <ProbeProtocol>tcp</ProbeProtocol>
      <Endpoint>120.XX.XX.21</Endpoint>
      <ProbePort>80</ProbePort>
      <EndpointId>ep-bp1d2utp8qqe2a44t3qqe</EndpointId>
    </EndpointConfigurations>
    <PortOverrides>
      <ListenerPort>443</ListenerPort>
      <EndpointPort>80</EndpointPort>
    </PortOverrides>
    <ForwardingRuleIds>frule-bp19a3t3yzt21q3****</ForwardingRuleIds>
    <EndpointGroupType>default</EndpointGroupType>
    <EndpointRequestProtocol>HTTP</EndpointRequestProtocol>
    <Description>group1</Description>
    <Name>group1</Name>
    <HealthCheckPort>10</HealthCheckPort>
    <HealthCheckEnabled>true</HealthCheckEnabled>
  </EndpointGroups>
</ListEndpointGroupsResponse>

```

JSON format

```

HTTP/1.1 200 OK
Content-Type:application/json
{
  "TotalCount": 10,
  "PageSize": 10,
  "RequestId": "A052D49E-CCC2-41DB-816C-DC3381503194\t",
  "PageNumber": 1,
  "EndpointGroups": [ {
    "EndpointGroupId": "epg-bp16jdc00bhe97sr5****",
    "EndpointGroupIpList": [ "101.XX.XX.22" ],
    "EndpointGroupUnconfirmedIpList": [ "101.XX.XX.22" ],
    "State": "active",
    "HealthCheckPath": "/healthcheck",
    "EndpointGroupRegion": "cn-hangzhou",
    "HealthCheckIntervalSeconds": 3,
    "TrafficPercentage": 20,
    "HealthCheckProtocol": "tcp",
    "ThresholdCount": 3,
    "ListenerId": "lsr-bp1bpn0kn908w4nbw****",
    "AcceleratorId": "ga-bp1odcab8tmno0hdq****",
    "EndpointConfigurations": [ {
      "Type": "Ip",
      "EnableClientIPPreservation": false,
      "Weight": 20,
      "ProbeProtocol": "tcp",
      "Endpoint": "120.XX.XX.21",
      "ProbePort": 80,
      "EndpointId": "ep-bp1d2utp8qqe2a44t3qeq"
    } ],
    "PortOverrides": [ {
      "ListenerPort": 443,
      "EndpointPort": 80
    } ],
    "ForwardingRuleIds": [ "frule-bp19a3t3yzt21q3****" ],
    "EndpointGroupType": "default",
    "EndpointRequestProtocol": "HTTP",
    "Description": "group1",
    "Name": "group1",
    "HealthCheckPort": 10,
    "HealthCheckEnabled": true
  } ]
}

```

## Error codes

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

## 9.4. UpdateEndpointGroup

Modifies the configuration of an endpoint group.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

## Request parameters

| Parameter                  | Type    | Required | Example                              | Description                                                                                                                                                                                                                                                                         |
|----------------------------|---------|----------|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action                     | String  | Yes      | UpdateEndpointGroup                  | The operation that you want to perform. Set the value to <b>UpdateEndpointGroup</b> .                                                                                                                                                                                               |
| RegionId                   | String  | Yes      | cn-hangzhou                          | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                  |
| ClientToken                | String  | No       | 123e4567-e89b-12d3-a456-426655440000 | The client token that is used to ensure the idempotence of the request.<br><br>You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length. |
| EndpointGroupId            | String  | Yes      | epg-bp1dmlhjz4kqaun****              | The ID of the endpoint group.                                                                                                                                                                                                                                                       |
| Name                       | String  | No       | group1                               | The name of the endpoint group.<br><br>The name must be 2 to 128 characters in length, and can contain letters, digits, underscores (_), and hyphens (-). The name must start with a letter.                                                                                        |
| Description                | String  | No       | EndpointGroup                        | The description of the endpoint group.                                                                                                                                                                                                                                              |
| EndpointGroupRegion        | String  | Yes      | cn-hangzhou                          | The ID of the region where the endpoint group is deployed.                                                                                                                                                                                                                          |
| TrafficPercentage          | Integer | No       | 20                                   | The weight of the endpoint group when the listener is associated with multiple endpoint groups.                                                                                                                                                                                     |
| HealthCheckIntervalSeconds | Integer | No       | 3                                    | The interval at which health checks are performed. Unit: seconds.                                                                                                                                                                                                                   |

| Parameter               | Type    | Required | Example      | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------|---------|----------|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HealthCheckPath         | String  | No       | /healthcheck | The path to which health check requests are sent.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| HealthCheckPort         | Integer | No       | 20           | The port used for health checks.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| HealthCheckProtocol     | String  | No       | tcp          | The protocol over which health check requests are sent. Valid values: <ul style="list-style-type: none"> <li><b>tcp</b>: TCP</li> <li><b>http</b>: HTTP</li> <li><b>https</b>: HTTPS</li> </ul>                                                                                                                                                                                                                                                                                                                     |
| ThresholdCount          | Integer | No       | 3            | The number of consecutive failed health checks that must occur before an endpoint is considered unhealthy.                                                                                                                                                                                                                                                                                                                                                                                                          |
| EndpointRequestProtocol | String  | No       | HTTP         | The protocol used by the backend service. Valid values: <ul style="list-style-type: none"> <li><b>HTTP</b></li> <li><b>HTTPS</b></li> </ul> <div>  <b>Note</b> <ul style="list-style-type: none"> <li>You can set this parameter only when the listener that is associated with the endpoint group uses the HTTP or HTTPS protocol.</li> <li>For an HTTP listener, the backend service protocol must be HTTP.</li> </ul> </div> |
| HealthCheckEnabled      | Boolean | No       | true         | Specifies whether to enable the health check feature. Valid values: <ul style="list-style-type: none"> <li><b>true</b> (default): enables the health check feature.</li> <li><b>false</b>: disables the health check feature.</li> </ul>                                                                                                                                                                                                                                                                            |

| Parameter                                           | Type    | Required | Example | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------|---------|----------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EndpointConfigurations.N.Type                       | String  | Yes      | Ip      | <p>The type of the endpoint. Valid values:</p> <ul style="list-style-type: none"> <li><b>Domain</b>: a custom domain name</li> <li><b>Ip</b>: a custom IP address</li> <li><b>PublicIp</b>: a public IP address provided by Alibaba Cloud</li> <li><b>ECS</b>: an Elastic Compute Service (ECS) instance</li> <li><b>SLB</b>: a Server Load Balancer (SLB) instance</li> <li><b>ALB</b>: an Application Load Balancer (ALB) instance</li> <li><b>OSS</b>: an Object Storage Service (OSS) bucket</li> </ul> <div> <p> <b>Note</b></p> <ul style="list-style-type: none"> <li>If you set this parameter to <b>ECS</b> or <b>SLB</b> and the service-linked role <code>AliyunServiceRoleForGaVpcEndpoint</code> does not exist, the system automatically creates the service-linked role.</li> <li>If you set this parameter to <b>ALB</b> and the service-linked role <code>AliyunServiceRoleForGaAlb</code> does not exist, the system automatically creates the service-linked role.</li> <li>If you set this parameter to <b>OSS</b> and the service-linked role <code>AliyunServiceRoleForGaOss</code> does not exist, the system automatically creates the service-linked role.</li> </ul> <p>For more information, see <a href="#">Service-linked roles</a>.</p> </div> |
| EndpointConfigurations.N.EnableClientIPPreservation | Boolean | No       | false   | <p>Specifies whether to preserve client IP addresses. Valid values:</p> <ul style="list-style-type: none"> <li><b>true</b>: preserves client IP addresses.</li> <li><b>false</b> (default): does not preserve client IP addresses.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

| Parameter                         | Type    | Required | Example      | Description                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------------------|---------|----------|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EndpointConfigurations.N.Weight   | Integer | Yes      | 20           | <p>The weight of the endpoint.</p> <p>Valid values: <b>0</b> to <b>255</b>.</p> <div><p> <b>Note</b> If you set the weight of an endpoint to 0, GA stops routing network traffic to the endpoint. Proceed with caution.</p></div>                                           |
| EndpointConfigurations.N.Endpoint | String  | Yes      | 120.XX.XX.21 | The IP address or domain name of the endpoint.                                                                                                                                                                                                                                                                                                                |
| PortOverrides.N.ListenerPort      | Integer | No       | 443          | <p>The listener port that is mapped to the endpoint port.</p> <div><p> <b>Note</b></p><ul style="list-style-type: none"><li>• Only HTTP and HTTPS listeners support port mapping.</li><li>• The listener port must be the one used by the current listener.</li></ul></div> |
| PortOverrides.N.EndpointPort      | Integer | No       | 80           | The endpoint port that is mapped to the listener port.                                                                                                                                                                                                                                                                                                        |

## Response parameters

| Parameter | Type   | Example                              | Description            |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | 6FEA0CF3-D3B9-43E5-A304-D217037876A8 | The ID of the request. |

## Examples

### Sample requests

```

http(s)://[Endpoint]/?Action=UpdateEndpointGroup
&RegionId=cn-hangzhou
&ClientToken=123e4567-e89b-12d3-a456-426655440000
&EndpointGroupId=epg-bp1dmlhjz4kqaun****
&Name=group1
&Description=EndpointGroup
&EndpointGroupRegion=cn-hangzhou
&TrafficPercentage=20
&HealthCheckIntervalSeconds=3
&HealthCheckPath=/healthcheck
&HealthCheckPort=20
&HealthCheckProtocol=tcp
&ThresholdCount=3
&EndpointConfigurations=[{"Type":"Ip","EnableClientIPPreservation":false,"Weight":20,"Endpoint":"120.XX.X
X.21"}]
&EndpointRequestProtocol=HTTP
&PortOverrides=[{"ListenerPort":443,"EndpointPort":80}]
&HealthCheckEnabled=true
&Common request parameters

```

### Sample success responses

#### XML format

```

HTTP/1.1 200 OK
Content-Type:application/xml
<UpdateEndpointGroupResponse>
  <RequestId>6FEA0CF3-D3B9-43E5-A304-D217037876A8 </RequestId>
</UpdateEndpointGroupResponse>

```

#### JSON format

```

HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "6FEA0CF3-D3B9-43E5-A304-D217037876A8\t"
}

```

## Error codes

| HttpCode | Error code                     | Error message                                      | Description                                                                                                                              |
|----------|--------------------------------|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| 400      | NoPermission.EnableHealthCheck | You do not have permission to enable health check. | The error message returned because you are unauthorized to enable the health check feature. You must apply to be added to the whitelist. |
| 400      | NotExist.EndPointGroup         | The endpoint group does not exist.                 | The error message returned because the specified endpoint group does not exist.                                                          |

| HttpCode | Error code                 | Error message                                     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------|----------------------------|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 400      | StateError.EndPointGroup   | The specified state of endpoint group is invalid. | The error message returned because the specified endpoint group is in an invalid state.                                                                                                                                                                                                                                                                                                                                                                                                    |
| 400      | NotExist.Listener          | The listener does not exist.                      | The error message returned because the specified listener does not exist.                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 400      | NotActive.Listener         | The state of the listener is not active.          | The error message returned because the specified listener is unstable.                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 400      | NotExist.Accelerator       | The accelerated instance does not exist.          | The error message returned because the specified GA instance does not exist.                                                                                                                                                                                                                                                                                                                                                                                                               |
| 400      | StateError.Accelerator     | The state of the accelerated instance is invalid. | The error message returned because the specified GA instance is in an invalid state.                                                                                                                                                                                                                                                                                                                                                                                                       |
| 400      | QuotaExceeded.Endpoint     | The maximum number of endpoints is exceeded.      | The error message returned because the number of endpoints has reached the upper limit.                                                                                                                                                                                                                                                                                                                                                                                                    |
| 400      | NoPermission.VpcEndpoint   | You are not authorized to perform the operation.  | The error message returned because you are unauthorized to create the service-linked role. Contact the owner of the Alibaba Cloud account or the administrator to acquire the AliyunGlobalAccelerationFullAccess permission or create a custom permission policy. The service name of the custom permission policy must be vpcendpoint.ga.aliyuncs.com, the service-linked role must be AliyunServiceRoleForGaVpcEndpoint, and the ram:CreateServiceLinkedRole permission must be granted. |
| 400      | QuotaExceeded.PortOverride | The number of port override exceeds the limit.    | The error message returned because the number of port mappings reaches the upper limit.                                                                                                                                                                                                                                                                                                                                                                                                    |

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

## 9.5. UpdateEndpointGroupAttribute

Modifies the name and description of a specified endpoint group.

## Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

## Request parameters

| Parameter       | Type   | Required | Example                              | Description                                                                                                                                                                                                                                                                         |
|-----------------|--------|----------|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action          | String | Yes      | UpdateEndpointGroupAttribute         | The operation that you want to perform. Set the value to <b>UpdateEndpointGroupAttribute</b> .                                                                                                                                                                                      |
| RegionId        | String | Yes      | cn-hangzhou                          | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                  |
| ClientToken     | String | No       | 123e4567-e89b-12d3-a456-426655440000 | The client token that is used to ensure the idempotence of the request.<br><br>You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length. |
| EndpointGroupId | String | Yes      | epg-bp1ple63864a5hyj5****            | The ID of the endpoint group.                                                                                                                                                                                                                                                       |
| Name            | String | No       | test                                 | The name of the endpoint group that you want to modify.<br><br>The name must be 2 to 128 characters in length, and can contain letters, digits, underscores (_), and hyphens (-). The name must start with a letter.                                                                |
| Description     | String | No       | testEndpointGroup                    | The description of the endpoint group that you want to modify.                                                                                                                                                                                                                      |

## Response parameters

| Parameter | Type   | Example                              | Description            |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | 6FEA0CF3-D3B9-43E5-A304-D217037876A8 | The ID of the request. |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=UpdateEndpointGroupAttribute
&RegionId=cn-hangzhou
&ClientToken=123e4567-e89b-12d3-a456-426655440000
&EndpointGroupId=epg-bp1ple63864a5hyj5****
&Name=test
&Description=testEndpointGroup
&Common request parameters
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<UpdateEndpointGroupAttributeResponse>
  <RequestId>6FEA0CF3-D3B9-43E5-A304-D217037876A8</RequestId>
</UpdateEndpointGroupAttributeResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "6FEA0CF3-D3B9-43E5-A304-D217037876A8"
}
```

## Error codes

| HttpCode | Error code               | Error message                                     | Description                                                                             |
|----------|--------------------------|---------------------------------------------------|-----------------------------------------------------------------------------------------|
| 400      | NotExist.EndPointGroup   | The endpoint group does not exist.                | The error message returned because the specified endpoint group does not exist.         |
| 400      | StateError.EndPointGroup | The specified state of endpoint group is invalid. | The error message returned because the specified endpoint group is in an invalid state. |

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

## 9.6. DeleteEndpointGroup

Deletes an endpoint group.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates a sample code of the operation for different SDKs.

## Request parameters

| Parameter       | Type   | Required | Example                              | Description                                                                                                                                                                                                                                                                  |
|-----------------|--------|----------|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action          | String | Yes      | DeleteEndpointGroup                  | The operation that you want to perform. Set the value to <b>DeleteEndpointGroup</b> .                                                                                                                                                                                        |
| ClientToken     | String | No       | 123e4567-e89b-12d3-a456-426655440000 | The client token that is used to ensure the idempotence of the request. You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length. |
| AcceleratorId   | String | No       | ga-bp1odcab8tmno0hdq****             | The ID of the Global Accelerator (GA) instance.                                                                                                                                                                                                                              |
| EndpointGroupId | String | Yes      | epg-bp1dmlohjjz4kqaun****            | The ID of the endpoint group that you want to delete.                                                                                                                                                                                                                        |

## Response parameters

| Parameter | Type   | Example                              | Description            |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | 6FEA0CF3-D3B9-43E5-A304-D217037876A8 | The ID of the request. |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=DeleteEndpointGroup
&AcceleratorId=ga-bp1odcab8tmno0hdq****
&EndpointGroupId=epg-bp1dmlohjjz4kqaun****
&<Common request parameters>
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<DeleteEndpointGroupResponse>
  <RequestId>6FEA0CF3-D3B9-43E5-A304-D217037876A8</RequestId>
</DeleteEndpointGroupResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "6FEA0CF3-D3B9-43E5-A304-D217037876A8"
}
```

## Error codes

| HttpCode | Error code               | Error message                                     | Description                                                                     |
|----------|--------------------------|---------------------------------------------------|---------------------------------------------------------------------------------|
| 400      | NotExist.EndPointGroup   | The endpoint group does not exist.                | The error message returned because the specified endpoint group does not exist. |
| 400      | StateError.EndPointGroup | The specified state of endpoint group is invalid. | The error message returned because the specified endpoint group is invalid.     |
| 400      | NotExist.Listener        | The listener does not exist.                      | The error message returned because the specified listener does not exist.       |
| 400      | NotActive.Listener       | The state of the listener is not active.          | The error message returned because the specified listener is unstable.          |
| 400      | NotExist.Accelerator     | The accelerated instance does not exist.          | The error message returned because the specified GA instance does not exist.    |
| 400      | StateError.Accelerator   | The state of the accelerated instance is invalid. | The error message returned because the specified GA instance is invalid.        |

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

## 9.7. AttachLogStoreToEndpointGroup

Associates a Log Service Logstore with an endpoint group.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates a sample code of the operation for different SDKs.

### Request parameters

| Parameter | Type   | Required | Example                       | Description                                                                                     |
|-----------|--------|----------|-------------------------------|-------------------------------------------------------------------------------------------------|
| Action    | String | Yes      | AttachLogStoreToEndpointGroup | The operation that you want to perform. Set the value to <b>AttachLogStoreToEndpointGroup</b> . |

| Parameter          | Type   | Required | Example                                                      | Description                                                                                                                                                                                                                                                                                |
|--------------------|--------|----------|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RegionId           | String | Yes      | cn-hangzhou                                                  | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                         |
| SlsProjectName     | String | Yes      | pn-01                                                        | The name of the Log Service project.                                                                                                                                                                                                                                                       |
| SlsLogStoreName    | String | Yes      | lsn-01                                                       | The name of the Logstore.                                                                                                                                                                                                                                                                  |
| AcceleratorId      | String | Yes      | ga-bp1odcab8tmno0hdq****                                     | The ID of the GA instance.                                                                                                                                                                                                                                                                 |
| ListenerId         | String | Yes      | lsr-bp1bpn0kn908w4nbw****                                    | The ID of the listener.                                                                                                                                                                                                                                                                    |
| SlsRegionId        | String | Yes      | cn-hangzhou                                                  | The region ID of the Log Service project.                                                                                                                                                                                                                                                  |
| ClientToken        | String | No       | 123e4567-e89b-12d3-a456-426655440000                         | <p>The client token that is used to ensure the idempotence of the request.</p> <p>You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length.</p> |
| EndpointGroupIds.N | String | Yes      | ['epg-bp1dmlhjz4kqaun****','epg-bp1v1u72cx35ogofe****', ...] | The IDs of endpoint groups.                                                                                                                                                                                                                                                                |

## Response parameters

| Parameter | Type   | Example                              | Description            |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | 6FEA0CF3-D3B9-43E5-A304-D217037876A8 | The ID of the request. |

## Examples

Sample requests

```
http(s)://[Endpoint]/?Action=AttachLogStoreToEndpointGroup
&RegionId=cn-hangzhou
&SlsProjectName=pn-01
&SlsLogStoreName=lsn-01
&AcceleratorId=ga-bp1odcab8tmno0hdq****
&ListenerId=lsr-bp1bpn0kn908w4nbw****
&SlsRegionId=cn-hangzhou
&EndpointGroupIds=["'epg-bp1dmlhjz4kqaun****','epg-bp1v1u72cx35ogofe****',..."]
&ClientToken=123e4567-e89b-12d3-a456-426655440000
&<Common request parameters>
```

#### Sample success responses

##### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<AttachLogStoreToEndpointGroupResponse>
  <RequestId>6FEA0CF3-D3B9-43E5-A304-D217037876A8</RequestId>
</AttachLogStoreToEndpointGroupResponse>
```

##### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "6FEA0CF3-D3B9-43E5-A304-D217037876A8"
}
```

## Error codes

| HttpCode | Error code             | Error message                                     | Description                                                                  |
|----------|------------------------|---------------------------------------------------|------------------------------------------------------------------------------|
| 400      | StateError.Accelerator | The state of the accelerated instance is invalid. | The error message returned because the specified GA instance is invalid.     |
| 400      | NotExist.Accelerator   | The accelerated instance does not exist.          | The error message returned because the specified GA instance does not exist. |

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

## 9.8. DetachLogStoreFromEndpointGroup

Disassociates a Log Service Logstore from an endpoint group.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates a sample code of the operation for different SDKs.

## Request parameters

| Parameter          | Type   | Required | Example                                                         | Description                                                                                                                                                                                                                                                                                   |
|--------------------|--------|----------|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action             | String | Yes      | DetachLogStoreFromEndpointGroup                                 | The operation that you want to perform. Set the value to <b>DetachLogStoreFromEndpointGroup</b> .                                                                                                                                                                                             |
| RegionId           | String | Yes      | cn-hangzhou                                                     | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                            |
| AcceleratorId      | String | Yes      | ga-bp1odcab8tmno0hdq****                                        | The ID of the GA instance.                                                                                                                                                                                                                                                                    |
| ListenerId         | String | Yes      | lsr-bp1bpn0kn908w4nbw****                                       | The ID of the listener.                                                                                                                                                                                                                                                                       |
| ClientToken        | String | No       | 02fb3da4****                                                    | <p>The client token that is used to ensure the idempotence of the request.</p> <p>You can use the client to generate the value, but you must make sure that it is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length.</p> |
| EndpointGroupIds.N | String | Yes      | ['epg-bp1dmlohjjz4kqaun****', 'epg-bp1v1u72cx35ogofe****', ...] | The IDs of endpoint groups.                                                                                                                                                                                                                                                                   |

## Response parameters

| Parameter | Type   | Example                              | Description            |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | 64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF | The ID of the request. |

## Examples

Sample requests

```
http(s)://[Endpoint]/?Action=DetachLogStoreFromEndpointGroup
&RegionId=cn-hangzhou
&AcceleratorId=ga-bp1odcab8tmno0hdq****
&ListenerId=lsr-bp1bpn0kn908w4nbw****
&EndpointGroupIds=["['epg-bp1dmlohjjz4kqaun****','epg-bp1v1u72cx35ogofe****',...]"]
&ClientToken=02fb3da4****
&<Common request parameters>
```

#### Sample success responses

##### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<DetachLogStoreFromEndpointGroupResponse>
  <RequestId>64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF</RequestId>
</DetachLogStoreFromEndpointGroupResponse>
```

##### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF"
}
```

## Error codes

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

# 9.9. CreateEndpointGroups

Creates one or more endpoint groups.

## Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

## Request parameters

| Parameter | Type   | Required | Example              | Description                                                                                                         |
|-----------|--------|----------|----------------------|---------------------------------------------------------------------------------------------------------------------|
| Action    | String | Yes      | CreateEndpointGroups | The operation that you want to perform. Set the value to <b>CreateEndpointGroups</b> .                              |
| RegionId  | String | Yes      | cn-hangzhou          | The ID of the region where your Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> . |

| Parameter                                              | Type    | Required | Example                              | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------------------------------|---------|----------|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ClientToken                                            | String  | No       | 1F4B6A4A-C89E-489E-BAF1-52777EE148EF | <p>The client token that is used to ensure the idempotence of the request.</p> <p>You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length.</p>                                                                                                                                                                                                                                                                                                                |
| DryRun                                                 | Boolean | No       | true                                 | <p>Specifies whether to precheck the request only. Valid values:</p> <ul style="list-style-type: none"> <li><b>true</b>: prechecks the request but does not create the endpoint group. The system prechecks the required parameters, request syntax, and limits. If the request fails to pass the precheck, an error message is returned. If the request passes the precheck, the error code <b>DryRunOperation</b> is returned.</li> <li><b>false</b> (default): sends the request. If the request passes the precheck, a 2xx HTTP status code is returned and the endpoint group is created.</li> </ul> |
| AcceleratorId                                          | String  | Yes      | ga-bp1odcab8tmno0hdq****             | The ID of the GA instance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| ListenerId                                             | String  | Yes      | lsr-bp1bpn0kn908w4nbw****            | The ID of the listener.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| EndpointGroupConfigurations.N.EndpointGroupName        | String  | No       | group1                               | The name of the endpoint group.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| EndpointGroupConfigurations.N.EndpointGroupDescription | String  | No       | group1                               | The description of the endpoint group.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| EndpointGroupConfigurations.N.EndpointGroupRegion      | String  | Yes      | cn-hangzhou                          | The ID of the region where you want to create the endpoint group.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| EndpointGroupConfigurations.N.TrafficPercentage        | Long    | No       | 20                                   | The weight of the endpoint group when the listener is associated with multiple endpoint groups.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

| Parameter                                                | Type    | Required | Example      | Description                                                                                                                                                                                                                              |
|----------------------------------------------------------|---------|----------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EndpointGroupConfigurations.N.HealthCheckEnabled         | Boolean | No       | false        | Specifies whether to enable the health check feature. Valid values: <ul style="list-style-type: none"> <li><b>true</b>: enables the health check feature.</li> <li><b>false</b> (default): disables the health check feature.</li> </ul> |
| EndpointGroupConfigurations.N.HealthCheckIntervalSeconds | Long    | No       | 3            | The interval at which health checks are performed. Unit: seconds.                                                                                                                                                                        |
| EndpointGroupConfigurations.N.HealthCheckPath            | String  | No       | /healthcheck | The path to which health check requests are sent.                                                                                                                                                                                        |
| EndpointGroupConfigurations.N.HealthCheckPort            | Long    | No       | 20           | The port used for health checks.                                                                                                                                                                                                         |
| EndpointGroupConfigurations.N.HealthCheckProtocol        | String  | No       | tcp          | The protocol over which health check requests are sent. Valid values: <ul style="list-style-type: none"> <li><b>tcp</b>: TCP</li> <li><b>http</b>: HTTP</li> <li><b>https</b>: HTTPS</li> </ul>                                          |
| EndpointGroupConfigurations.N.ThresholdCount             | Long    | No       | 3            | The number of consecutive failed health checks that must occur before an endpoint is considered unhealthy.                                                                                                                               |

| Parameter                                                     | Type   | Required | Example | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------|--------|----------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EndpointGroupConfigurations.N.EndpointConfigurations.N.Type   | String | No       | Ip      | <p>The type of the endpoint. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>Domain</b>: a custom domain name</li> <li>• <b>Ip</b>: a custom IP address</li> <li>• <b>PublicIp</b>: a public IP address provided by Alibaba Cloud</li> <li>• <b>ECS</b>: an Elastic Compute Service (ECS) instance</li> <li>• <b>SLB</b>: a Server Load Balancer (SLB) instance</li> <li>• <b>ALB</b>: an Application Load Balancer (ALB) instance</li> <li>• <b>OSS</b>: an Object Storage Service (OSS) bucket</li> </ul> <div> <p> <b>Note</b></p> <ul style="list-style-type: none"> <li>• If you set this parameter to <b>ECS</b> or <b>SLB</b> and the service-linked role <code>AliyunServiceRoleForGaVpcEndpoint</code> does not exist, the system automatically creates the service-linked role.</li> <li>• If you set this parameter to <b>ALB</b> and the service-linked role <code>AliyunServiceRoleForGaAlb</code> does not exist, the system automatically creates the service-linked role.</li> <li>• If you set this parameter to <b>OSS</b> and the service-linked role <code>AliyunServiceRoleForGaOss</code> does not exist, the system automatically creates the service-linked role.</li> </ul> <p>For more information, see <a href="#">Service-linked roles</a>.</p> </div> |
| EndpointGroupConfigurations.N.EndpointConfigurations.N.Weight | Long   | No       | 20      | The weight of the endpoint.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

| Parameter                                                             | Type    | Required | Example      | Description                                                                                                                                                                                |
|-----------------------------------------------------------------------|---------|----------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EndpointGroupConfigurations.N.EndpointConfiguration.N.Endpoint        | String  | No       | 120.XX.XX.21 | The IP address or domain name of the endpoint.                                                                                                                                             |
| EndpointGroupConfigurations.N.EndpointRequestProtocol                 | String  | No       | HTTP         | The protocol used by the backend service. Valid values: <ul style="list-style-type: none"> <li><b>HTTP</b>: HTTP</li> <li><b>HTTPS</b>: HTTPS</li> </ul>                                   |
| EndpointGroupConfigurations.N.EndpointGroupType                       | String  | No       | default      | The type of the endpoint group. Valid values: <ul style="list-style-type: none"> <li><b>default</b>: a default endpoint group</li> <li><b>virtual</b>: a virtual endpoint group</li> </ul> |
| EndpointGroupConfigurations.N.PortOverrides.N.ListenerPort            | Long    | No       | 443          | The listener port.                                                                                                                                                                         |
| EndpointGroupConfigurations.N.PortOverrides.N.EndpointPort            | Long    | No       | 80           | The endpoint port.                                                                                                                                                                         |
| EndpointGroupConfigurations.N.EnableClientIPPreservationToa           | Boolean | No       | false        | Specifies whether to use the TCP Option Address (TOA) module to preserve client IP addresses. Valid values: <b>true</b> and <b>false</b> . Default value: false.                           |
| EndpointGroupConfigurations.N.EnableClientIPPreservationProxyProtocol | Boolean | No       | false        | Specifies whether to use the proxy protocol to preserve client IP addresses. Valid values: <b>true</b> and <b>false</b> . Default value: false.                                            |

## Response parameters

| Parameter        | Type            | Example                                                       | Description                     |
|------------------|-----------------|---------------------------------------------------------------|---------------------------------|
| RequestId        | String          | 6FEA0CF3-D3B9-43E5-A304-D217037876A8                          | The ID of the request.          |
| EndpointGroupIds | Array of String | ['epg-bp1dmlohjjz4kqaun***', 'epg-bp1v1u72cx35ogofe***', ...] | The IDs of the endpoint groups. |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=CreateEndpointGroups
&RegionId=cn-hangzhou
&ClientToken=1F4B6A4A-C89E-489E-BAF1-52777EE148EF
&DryRun=true
&AcceleratorId=ga-bp1odcab8tmno0hdq****
&ListenerId=lsr-bp1bpn0kn908w4nbw****
&EndpointGroupConfigurations=[{"EndpointGroupName":"group1","EndpointGroupDescription":"group1","EndpointGroupRegion":"cn-hangzhou","TrafficPercentage":20,"HealthCheckEnabled":false,"HealthCheckIntervalSeconds":3,"HealthCheckPath":"/healthcheck","HealthCheckPort":20,"HealthCheckProtocol":"tcp","ThresholdCount":3,"EndpointConfigurations":[{"Type":"Ip","Weight":20,"Endpoint":"120.XX.XX.21"}],"EndpointRequestProtocol":"HTTP","EndpointGroupType":"default","PortOverrides":[{"ListenerPort":443,"EndpointPort":80}],"EnableClientIPPreservationToa":false,"EnableClientIPPreservationProxyProtocol":false}]
&Common request parameters
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<CreateEndpointGroupsResponse>
  <RequestId>6FEA0CF3-D3B9-43E5-A304-D217037876A8</RequestId>
  <EndpointGroupIds>['epg-bp1dmlhjz4kqaun****','epg-bp1v1u72cx35ogofe****',...]</EndpointGroupIds>
</CreateEndpointGroupsResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "6FEA0CF3-D3B9-43E5-A304-D217037876A8",
  "EndpointGroupIds": [ "'epg-bp1dmlhjz4kqaun****','epg-bp1v1u72cx35ogofe****',...]" ]
}
```

## Error codes

| HttpCode | Error code                     | Error message                                      | Description                                                                                                                              |
|----------|--------------------------------|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| 400      | NoPermission.EnableHealthCheck | You do not have permission to enable health check. | The error message returned because you are unauthorized to enable the health check feature. You must apply to be added to the whitelist. |
| 400      | NotExist.Listener              | The listener does not exist.                       | The error message returned because the specified listener does not exist.                                                                |

| HttpCode | Error code                     | Error message                                     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------|--------------------------------|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 400      | NotActive.Listener             | The state of the listener is not active.          | The error message returned because the specified listener is unstable.                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 400      | NotExist.Accelerator           | The accelerated instance does not exist.          | The error message returned because the specified GA instance does not exist.                                                                                                                                                                                                                                                                                                                                                                                                               |
| 400      | StateError.Accelerator         | The state of the accelerated instance is invalid. | The error message returned because the specified GA instance is in an invalid state.                                                                                                                                                                                                                                                                                                                                                                                                       |
| 400      | NotExist.BusinessRegion        | The business region does not exist.               | The error message returned because the specified region does not exist.                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 400      | NotExist.BasicBandwidthPackage | You must specify the basic bandwidth package.     | The error message returned because no basic bandwidth plan is specified.                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 400      | QuotaExceeded.Endpoint         | The maximum number of endpoints is exceeded.      | The error message returned because the number of endpoints has reached the upper limit.                                                                                                                                                                                                                                                                                                                                                                                                    |
| 400      | NoPermission.VpcEndpoint       | You are not authorized to perform the operation.  | The error message returned because you are unauthorized to create the service-linked role. Contact the owner of the Alibaba Cloud account or the administrator to acquire the AliyunGlobalAccelerationFullAccess permission or create a custom permission policy. The service name of the custom permission policy must be vpcendpoint.ga.aliyuncs.com, the service-linked role must be AliyunServiceRoleForGaVpcEndpoint, and the ram:CreateServiceLinkedRole permission must be granted. |
| 400      | QuotaExceeded.PortOverride     | The number of port override exceeds the limit.    | The error message returned because the number of port mappings reaches the upper limit.                                                                                                                                                                                                                                                                                                                                                                                                    |

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

## 9.10. UpdateEndpointGroups

Modifies one or more endpoint groups that are associated with a listener.

## Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

## Request parameters

| Parameter   | Type    | Required | Example                              | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------|---------|----------|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action      | String  | Yes      | UpdateEndpointGroups                 | The operation that you want to perform. Set the value to <b>UpdateEndpointGroups</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| RegionId    | String  | Yes      | cn-hangzhou                          | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| ClientToken | String  | No       | 123e4567-e89b-12d3-a456-426655440000 | The client token that is used to ensure the idempotence of the request.<br><br>You can use the client to generate the value. Make sure that the value is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| DryRun      | Boolean | No       | true                                 | Specifies whether only to precheck the request. Valid values: <ul style="list-style-type: none"> <li><b>true</b>: only prechecks the request. If this value is used, the system does not modify the specified endpoint groups when the request passes the precheck. The system checks the required parameters, request format, and service limits. If the request fails the precheck, the system returns an error code based on the cause of the failure. If the request passes the precheck, the system returns the <b>DryRunOperation</b> error code.</li> <li><b>false</b>: prechecks the request and then sends the request if the request passes the precheck. This value is the default value. After the request passes the precheck, the system returns a 2XX HTTP status code and modifies the specified endpoint groups.</li> </ul> |

| Parameter                                                | Type    | Required | Example                   | Description                                                                                                                                                                                                                                                     |
|----------------------------------------------------------|---------|----------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ListenerId                                               | String  | Yes      | lsr-bp1bpn0kn908w4nbw**** | The ID of the listener associated with the endpoint groups that you want to modify.                                                                                                                                                                             |
| EndpointGroupConfigurations.N.EndpointGroupName          | String  | No       | group1                    | The name of the endpoint group.                                                                                                                                                                                                                                 |
| EndpointGroupConfigurations.N.EndpointGroupDescription   | String  | No       | group1                    | The description of the endpoint group.                                                                                                                                                                                                                          |
| EndpointGroupConfigurations.N.TrafficPercentage          | Long    | No       | 20                        | The weight of the endpoint group. This parameter takes effect if the listener is associated with multiple endpoint groups.                                                                                                                                      |
| EndpointGroupConfigurations.N.HealthCheckEnabled         | Boolean | No       | true                      | Specifies whether to enable the health check feature. Valid values: <ul style="list-style-type: none"> <li><b>true</b>: enables the health check feature.</li> <li><b>false</b>: disables the health check feature. This value is the default value.</li> </ul> |
| EndpointGroupConfigurations.N.HealthCheckIntervalSeconds | Long    | No       | 3                         | The interval between two consecutive health checks. Unit: seconds.                                                                                                                                                                                              |
| EndpointGroupConfigurations.N.HealthCheckPath            | String  | No       | /healthcheck              | The path to which the health check requests are sent.                                                                                                                                                                                                           |
| EndpointGroupConfigurations.N.HealthCheckPort            | Long    | No       | 20                        | The port that is used for health checks.                                                                                                                                                                                                                        |
| EndpointGroupConfigurations.N.HealthCheckProtocol        | String  | No       | tcp                       | The protocol over which health check requests are sent. Valid values: <ul style="list-style-type: none"> <li><b>tcp</b></li> <li><b>http</b></li> <li><b>https</b></li> </ul>                                                                                   |
| EndpointGroupConfigurations.N.ThresholdCount             | Long    | No       | 3                         | The number of consecutive failed health checks that must occur before an endpoint is considered unhealthy.                                                                                                                                                      |

| Parameter                                                             | Type    | Required | Example                  | Description                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------------------------------------------------|---------|----------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EndpointGroupConfigurations.N.EndpointConfigurations.N.Type           | String  | No       | Ip                       | The type of the endpoint. Valid values: <ul style="list-style-type: none"> <li>• <b>Domain</b>: a custom domain name</li> <li>• <b>Ip</b>: a custom IP address</li> <li>• <b>PublicIp</b>: an Alibaba Cloud public IP address</li> <li>• <b>ECS</b>: an Alibaba Cloud Elastic Compute Service (ECS) instance</li> <li>• <b>SLB</b>: an Alibaba Cloud Server Load Balancer (SLB) instance</li> </ul> |
| EndpointGroupConfigurations.N.EndpointConfigurations.N.Weight         | Long    | No       | 20                       | The weight of the endpoint.                                                                                                                                                                                                                                                                                                                                                                         |
| EndpointGroupConfigurations.N.EndpointConfigurations.N.Endpoint       | String  | No       | 120.XX.XX. 21            | The IP address or domain name of the endpoint.                                                                                                                                                                                                                                                                                                                                                      |
| EndpointGroupConfigurations.N.EndpointRequestProtocol                 | String  | No       | HTTP                     | The protocol used by the backend service. Valid values: <ul style="list-style-type: none"> <li>• <b>HTTP</b></li> <li>• <b>HTTPS</b></li> </ul>                                                                                                                                                                                                                                                     |
| EndpointGroupConfigurations.N.PortOverrides.N.ListenerPort            | Long    | No       | 443                      | The listening port.                                                                                                                                                                                                                                                                                                                                                                                 |
| EndpointGroupConfigurations.N.PortOverrides.N.EndpointPort            | Long    | No       | 80                       | The port that is used to connect to the endpoint.                                                                                                                                                                                                                                                                                                                                                   |
| EndpointGroupConfigurations.N.EnableClientIPPreservationToa           | Boolean | No       | false                    | Specifies whether to use the TCP Option Address (TOA) module to preserve client IP addresses. Valid values: <b>true</b> and <b>false</b> . Default value: false.                                                                                                                                                                                                                                    |
| EndpointGroupConfigurations.N.EnableClientIPPreservationProxyProtocol | Boolean | No       | false                    | Specifies whether to use the proxy protocol to preserve client IP addresses. Valid values: <b>true</b> and <b>false</b> . Default value: false.                                                                                                                                                                                                                                                     |
| EndpointGroupConfigurations.N.EndpointGroupId                         | String  | Yes      | ep-bp1d2utp8qqe2a44t3qeq | The ID of the endpoint.                                                                                                                                                                                                                                                                                                                                                                             |

## Response parameters

| Parameter        | Type            | Example                                                         | Description                 |
|------------------|-----------------|-----------------------------------------------------------------|-----------------------------|
| RequestId        | String          | 6FEA0CF3-D3B9-43E5-A304-D217037876A8                            | The ID of the request.      |
| EndpointGroupIds | Array of String | ['epg-bp1dmlohjjz4kqaun****', 'epg-bp1v1u72cx35ogofe****', ...] | The IDs of endpoint groups. |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=UpdateEndpointGroups
&RegionId=cn-hangzhou
&ClientToken=123e4567-e89b-12d3-a456-426655440000
&DryRun=true
&EndpointGroupConfigurations=[{"EndpointGroupName":"group1","EndpointGroupDescription":"group1","TrafficPercentage":20,"HealthCheckEnabled":true,"HealthCheckIntervalSeconds":3,"HealthCheckPath":"/healthcheck","HealthCheckPort":20,"HealthCheckProtocol":"tcp","ThresholdCount":3,"EndpointConfigurations":[{"Type":"ip","Weight":20,"Endpoint":"120.XX.XX.21"}],"EndpointRequestProtocol":"HTTP","PortOverrides":[{"ListenerPort":443,"EndpointPort":80}],{"EnableClientIPPreservationToa":false,"EnableClientIPPreservationProxyProtocol":false,"EndpointGroupId":"ep-bp1d2utp8qqe2a44t3qqe"}}]
&ListenerId=lsr-bp1bpn0kn908w4nbw****
&<Common request parameters>
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<UpdateEndpointGroupsResponse>
  <RequestId>6FEA0CF3-D3B9-43E5-A304-D217037876A8</RequestId>
  <EndpointGroupIds>['epg-bp1dmlohjjz4kqaun****','epg-bp1v1u72cx35ogofe****',...]</EndpointGroupIds>
</UpdateEndpointGroupsResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "6FEA0CF3-D3B9-43E5-A304-D217037876A8",
  "EndpointGroupIds": [ 'epg-bp1dmlohjjz4kqaun****', 'epg-bp1v1u72cx35ogofe****', ... ]
}
```

## Error codes

| HTTP status code | Error code                     | Error message                                      | Description                                                                                                                                |
|------------------|--------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| 400              | NoPermission.EnableHealthCheck | You do not have permission to enable health check. | The error message returned because you are not authorized to enable the health check feature. You must apply for the required permissions. |
| 400              | NotExist.EndPointGroup         | The endpoint group does not exist.                 | The error message returned because the specified endpoint group does not exist.                                                            |
| 400              | StateError.EndPointGroup       | The specified state of endpoint group is invalid.  | The error message returned because the specified endpoint group is in an invalid status.                                                   |
| 400              | NotExist.Listener              | The listener does not exist.                       | The error message returned because the specified listener does not exist.                                                                  |
| 400              | NotActive.Listener             | The state of the listener is not active.           | The error message returned because the specified listener is in an unstable status.                                                        |
| 400              | NotExist.Accelerator           | The accelerated instance does not exist.           | The error message returned because the specified GA instance does not exist.                                                               |
| 400              | StateError.Accelerator         | The state of the accelerated instance is invalid.  | The error message returned because the specified GA instance is in an invalid status.                                                      |
| 400              | QuotaExceeded.Endpoint         | The maximum number of endpoints is exceeded.       | The error message returned because the number of endpoints has reached the upper limit.                                                    |

| HTTP status code | Error code                 | Error message                                    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------|----------------------------|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 400              | NoPermission.VpcEndpoint   | You are not authorized to perform the operation. | The error message returned because you are not authorized to create the service-linked role. Contact the owner of the Alibaba Cloud account or the permission administrator to grant the current user the <code>AliyunGlobalAccelerationFullAccess</code> permission or custom permissions. The custom permissions must allow you to create the service-linked role. Configure the following information to customize a permission policy: 1. Set the service name to <code>vpcendpoint.ga.aliyuncs.com</code> . 2. Set the name of the service-linked role to <code>AliyunServiceRoleForGaVpcEndpoint</code> . 3. Set the required permissions to <code>ram:CreateServiceLinkedRole</code> . |
| 400              | QuotaExceeded.PortOverride | The number of port override exceeds the limit.   | The error message returned because the number of port overrides has reached the upper limit.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

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

## 9.11. ConfigEndpointProbe

Configures latency monitoring on an endpoint.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates a sample code of the operation for different SDKs.

### Request parameters

| Parameter | Type   | Required | Example             | Description                                                                                 |
|-----------|--------|----------|---------------------|---------------------------------------------------------------------------------------------|
| Action    | String | Yes      | ConfigEndpointProbe | The operation that you want to perform. Set the value to <code>ConfigEndpointProbe</code> . |

| Parameter       | Type   | Required | Example                              | Description                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------|--------|----------|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RegionId        | String | Yes      | cn-hangzhou                          | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                                                                                                                                                                                       |
| ClientToken     | String | No       | 123e4567-e89b-12d3-a456-426655440000 | The client token that is used to ensure the idempotence of the request.<br>You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length.                                                                                                                                                                          |
| EndpointGroupId | String | Yes      | epg-bp1dmlohjjz4kqaun****            | The ID of the endpoint group.                                                                                                                                                                                                                                                                                                                                                                                                                            |
| EndpointType    | String | Yes      | Ip                                   | The type of the endpoint. Valid values: <ul style="list-style-type: none"> <li><b>Ip</b>: a custom IP address</li> <li><b>Domain</b>: a custom domain name</li> <li><b>EIP</b>: an Alibaba Cloud elastic IP address (EIP)</li> <li><b>PublicIp</b>: an Alibaba Cloud public IP address</li> <li><b>ECS</b>: an Alibaba Cloud Elastic Compute Service (ECS) instance</li> <li><b>SLB</b>: an Alibaba Cloud Server Load Balancer (SLB) instance</li> </ul> |
| Endpoint        | String | Yes      | 127.XX.XX.21                         | The endpoint.                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| ProbeProtocol   | String | No       | tcp                                  | The protocol that is used to monitor latency. Valid values: <ul style="list-style-type: none"> <li><b>tcp</b></li> <li><b>icmp</b></li> </ul>                                                                                                                                                                                                                                                                                                            |
| ProbePort       | String | No       | 80                                   | The port that is used to monitor latency. Valid values: <b>0</b> to <b>65535</b> .                                                                                                                                                                                                                                                                                                                                                                       |
| Enable          | String | Yes      | true                                 | Specifies whether to enable latency monitoring. Valid values: <b>true</b> and <b>false</b> . Default value: false.                                                                                                                                                                                                                                                                                                                                       |

## Response parameters

| Parameter | Type   | Example                              | Description            |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | 6FEA0CF3-D3B9-43E5-A304-D217037876A8 | The ID of the request. |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=ConfigEndpointProbe
&RegionId=cn-hangzhou
&ClientToken=123e4567-e89b-12d3-a456-426655440000
&EndpointGroupId=epg-bp1dmlhjz4kqaun****
&EndpointType=lp
&Endpoint=127.XX.XX.21
&ProbeProtocol=tcp
&ProbePort=80
&Enable=true
&<Common request parameters>
```

### Sample responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<ConfigEndpointProbeResponse>
  <RequestId>6FEA0CF3-D3B9-43E5-A304-D217037876A8</RequestId>
</ConfigEndpointProbeResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "6FEA0CF3-D3B9-43E5-A304-D217037876A8"
}
```

## Error codes

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

# 9.12. DeleteEndpointGroups

Deletes endpoint groups.

## Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

## Request parameters

| Parameter          | Type    | Required | Example                                                       | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------|---------|----------|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action             | String  | Yes      | DeleteEndpointGroups                                          | The operation that you want to perform. Set the value to <b>DeleteEndpointGroups</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| RegionId           | String  | Yes      | cn-hangzhou                                                   | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| ClientToken        | String  | No       | 1F4B6A4A-C89E-489E-BAF1-52777EE148EF                          | The client token that is used to ensure the idempotence of the request.<br><br>You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can only contain ASCII characters and cannot exceed 64 characters in length.                                                                                                                                                                                                                                                                                                                                      |
| DryRun             | Boolean | No       | true                                                          | Specifies whether only to precheck the request. Valid values: <ul style="list-style-type: none"> <li><b>true</b>: prechecks the request without creating resources. The system checks the required parameters, request format, and service limits. If the request fails the precheck, the system returns an error code based on the cause of the failure. If the precheck is successful, the error code <b>DryRunOperation</b> is returned.</li> <li><b>false</b>: sends the request. If the precheck is successful, a 2xx HTTP status code is returned and the operation is performed. Default value: false.</li> </ul> |
| EndpointGroupIds.N | String  | Yes      | ['epg-bp1dmlhjz4kqaun****', 'epg-bp1v1u72cx35ogofe****', ...] | The IDs of endpoint groups.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

## Response parameters

| Parameter | Type | Example | Description |
|-----------|------|---------|-------------|
|-----------|------|---------|-------------|

| Parameter | Type   | Example                              | Description            |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | 6FEA0CF3-D3B9-43E5-A304-D217037876A8 | The ID of the request. |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=DeleteEndpointGroups
&RegionId=cn-hangzhou
&ClientToken=1F4B6A4A-C89E-489E-BAF1-52777EE148EF
&DryRun=true
&EndpointGroupIds=["['epg-bp1dmlohjjz4kqaun****','epg-bp1v1u72cx35ogofe****',...]"]
&<Common request parameters>
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<DeleteEndpointGroupsResponse>
  <RequestId>6FEA0CF3-D3B9-43E5-A304-D217037876A8</RequestId>
</DeleteEndpointGroupsResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "6FEA0CF3-D3B9-43E5-A304-D217037876A8"
}
```

## Error codes

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

# 10.Areas and regions

## 10.1. ListAccelerateAreas

You can call this operation to query the available acceleration areas and regions.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

### Request parameters

| Parameter | Type   | Required | Example             | Description                                                                             |
|-----------|--------|----------|---------------------|-----------------------------------------------------------------------------------------|
| Action    | String | Yes      | ListAccelerateAreas | The operation that you want to perform. Set the value to <b>ListAccelerateAreas</b> .   |
| RegionId  | String | Yes      | cn-hangzhou         | The region ID of the Global Accelerator instance. Set the value to <b>cn-hangzhou</b> . |

### Response parameters

| Parameter  | Type   | Example                              | Description                        |
|------------|--------|--------------------------------------|------------------------------------|
| RequestId  | String | 6FEA0CF3-D3B9-43E5-A304-D217037876A8 | The ID of the request.             |
| Areas      | Array  |                                      | The acceleration areas.            |
| AreaId     | String | cn-huabei                            | The ID of the acceleration area.   |
| LocalName  | String | China North                          | The name of the acceleration area. |
| RegionList | Array  |                                      | The list of regions.               |
| RegionId   | String | cn-qingdao                           | The ID of the region.              |
| LocalName  | String | China (Qingdao)                      | The name of the region.            |

### Examples

## Sample requests

```
http(s)://[Endpoint]/? Action=ListAccelerateAreas
&RegionId=cn-hangzhou
&<Common request parameters>
```

## Sample success responses

## XML format

```
<ListAccelerateAreasResponse>
  <Areas>
    <AreaId>North-America</AreaId>
    <LocalName>North America</LocalName>
    <RegionList>
      <RegionId>us-west-1</RegionId>
      <LocalName>US (Silicon Valley)</LocalName>
    </RegionList>
    <RegionList>
      <RegionId>us-east-1</RegionId>
      <LocalName>US (Virginia)</LocalName>
    </RegionList>
  </Areas>
  <Areas>
    <AreaId>China</AreaId>
    <LocalName>China</LocalName>
    <RegionList>
      <RegionId>cn-hangzhou</RegionId>
      <LocalName>China (Hangzhou)</LocalName>
    </RegionList>
    <RegionList>
      <RegionId>cn-beijing</RegionId>
      <LocalName>China (Beijing)</LocalName>
    </RegionList>
  </Areas>
  <RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
</ListAccelerateAreasResponse>
```

## JSON format

```
{
  "Areas": [
    {
      "AreaId": "North-America",
      "LocalName": "North America",
      "RegionList": [
        {
          "RegionId": "us-west-1",
          "LocalName": "US (Silicon Valley)"
        },
        {
          "RegionId": "us-east-1",
          "LocalName": "US (Virginia)"
        }
      ]
    },
    {
      "AreaId": "China",
      "LocalName": "China",
      "RegionList": [
        {
          "RegionId": "cn-hangzhou",
          "LocalName": "China (Hangzhou)"
        },
        {
          "RegionId": "cn-beijing",
          "LocalName": "China (Beijing)"
        }
      ]
    }
  ],
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368"
}
```

## Error codes

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

# 10.2. ListBusiRegions

Queries regions that support Global Accelerator (GA).

## Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

## Request parameters

| Parameter | Type | Required | Example | Description |
|-----------|------|----------|---------|-------------|
|-----------|------|----------|---------|-------------|

| Parameter | Type   | Required | Example         | Description                                                                       |
|-----------|--------|----------|-----------------|-----------------------------------------------------------------------------------|
| Action    | String | Yes      | ListBusiRegions | The operation that you want to perform. Set the value to <b>ListBusiRegions</b> . |
| RegionId  | String | Yes      | cn-hangzhou     | The region ID of the GA instance. Set the value to <b>cn-hangzhou</b> .           |

## Response parameters

| Parameter | Type             | Example                              | Description                        |
|-----------|------------------|--------------------------------------|------------------------------------|
| Regions   | Array of Regions |                                      | The information about the regions. |
| LocalName | String           | Hangzhou                             | The region name.                   |
| RegionId  | String           | cn-hangzhou                          | The region ID.                     |
| RequestId | String           | 6FEA0CF3-D3B9-43E5-A304-D217037876A8 | The ID of the request.             |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=ListBusiRegions
&RegionId=cn-hangzhou
&<Common request parameters>
```

### Sample success responses

#### XML format

```
<RequestId>1A2262A0-B50A-4C27-8543-E91D9447F967</RequestId>
<Regions>
  <RegionId>cn-qingdao</RegionId>
  <LocalName>China (Qingdao)</LocalName>
</Regions>
<Regions>
  <RegionId>us-west-1</RegionId>
  <LocalName>US (Silicon Valley)</LocalName>
</Regions>
<Regions>
  <RegionId>cn-beijing</RegionId>
  <LocalName>China (Beijing)</LocalName>
</Regions>
```

```

<Regions>
  <RegionId>cn-hangzhou</RegionId>
  <LocalName>China (Hangzhou)</LocalName>
</Regions>
<Regions>
  <RegionId>cn-shanghai</RegionId>
  <LocalName>China (Shanghai)</LocalName>
</Regions>
<Regions>
  <RegionId>cn-chengdu</RegionId>
  <LocalName>China (Chengdu)</LocalName>
</Regions>
<Regions>
  <RegionId>cn-shenzhen</RegionId>
  <LocalName>China (Shenzhen)</LocalName>
</Regions>
<Regions>
  <RegionId>cn-hongkong</RegionId>
  <LocalName>China (Hong Kong)</LocalName>
</Regions>
<Regions>
  <RegionId>ap-northeast-1</RegionId>
  <LocalName>Japan (Tokyo)</LocalName>
</Regions>
<Regions>
  <RegionId>ap-south-1</RegionId>
  <LocalName>India (Mumbai)</LocalName>
</Regions>
<Regions>
  <RegionId>ap-southeast-1</RegionId>
  <LocalName>Singapore</LocalName>
</Regions>
<Regions>
  <RegionId>ap-southeast-2</RegionId>
  <LocalName>Australia (Sydney)</LocalName>
</Regions>
<Regions>
  <RegionId>ap-southeast-3</RegionId>
  <LocalName>Malaysia (Kuala Lumpur)</LocalName>
</Regions>
<Regions>
  <RegionId>ap-southeast-5</RegionId>
  <LocalName>Indonesia (Jakarta)</LocalName>
</Regions>
<Regions>
  <RegionId>us-east-1</RegionId>
  <LocalName>>US (Virginia)</LocalName>
</Regions>
<Regions>
  <RegionId>eu-central-1</RegionId>
  <LocalName>Germany (Frankfurt)</LocalName>
</Regions>
<Regions>
  <RegionId>eu-west-1</RegionId>
  <LocalName>UK (London)</LocalName>
</Regions>

```

```
</Regions>
<Regions>
  <RegionId>ap-northeast-2-pop</RegionId>
  <LocalName>South Korea</LocalName>
</Regions>
```

#### JSON format

```
{
  "RequestId": "1A2262A0-B50A-4C27-8543-E91D9447F967",
  "Regions": [
    {
      "RegionId": "cn-qingdao",
      "LocalName": "China (Qingdao)"
    },
    {
      "RegionId": "us-west-1",
      "LocalName": "US (Silicon Valley)"
    },
    {
      "RegionId": "cn-beijing",
      "LocalName": "China (Beijing)"
    },
    {
      "RegionId": "cn-hangzhou",
      "LocalName": "China (Hangzhou)"
    },
    {
      "RegionId": "cn-shanghai",
      "LocalName": "China (Shanghai)"
    },
    {
      "RegionId": "cn-chengdu",
      "LocalName": "China (Chengdu)"
    },
    {
      "RegionId": "cn-shenzhen",
      "LocalName": "China (Shenzhen)"
    },
    {
      "RegionId": "cn-hongkong",
      "LocalName": "China (Hong Kong)"
    },
    {
      "RegionId": "ap-northeast-1",
      "LocalName": "Japan (Tokyo)"
    },
    {
      "RegionId": "ap-south-1",
      "LocalName": "India (Mumbai)"
    },
    {
      "RegionId": "ap-southeast-1",
      "LocalName": "Singapore"
    },
  ]
}
```

```
{
  "RegionId": "ap-southeast-2",
  "LocalName": "Australia (Sydney)"
},
{
  "RegionId": "ap-southeast-3",
  "LocalName": "Malaysia (Kuala Lumpur)"
},
{
  "RegionId": "ap-southeast-5",
  "LocalName": "Indonesia (Jakarta)"
},
{
  "RegionId": "us-east-1",
  "LocalName": "US (Virginia)"
},
{
  "RegionId": "eu-central-1",
  "LocalName": "Germany (Frankfurt)"
},
{
  "RegionId": "eu-west-1",
  "LocalName": "UK (London)"
},
{
  "RegionId": "ap-northeast-2-pop",
  "LocalName": "South Korea"
}
]
```

## Error codes

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

# 10.3. DescribeRegions

You can call this operation to query the regions that Global Accelerator instances can be deployed.

## Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

## Request parameters

| Parameter | Type   | Required | Example         | Description                                                                       |
|-----------|--------|----------|-----------------|-----------------------------------------------------------------------------------|
| Action    | String | Yes      | DescribeRegions | The operation that you want to perform. Set the value to <b>DescribeRegions</b> . |

| Parameter | Type   | Required | Example     | Description                    |
|-----------|--------|----------|-------------|--------------------------------|
| RegionId  | String | Yes      | cn-hangzhou | The ID of the region to query. |

## Response parameters

| Parameter | Type   | Example                              | Description                    |
|-----------|--------|--------------------------------------|--------------------------------|
| RequestId | String | 611CB80C-B6A9-43DB-9E38-0B0AC3D9B58F | The ID of the request.         |
| Regions   | Array  |                                      | The list of available regions. |
| RegionId  | String | cn-hangzhou                          | The ID of the region.          |
| LocalName | String | China (Hangzhou)                     | The name of the region.        |

## Examples

### Sample requests

```
http(s)://[Endpoint]/? Action=DescribeRegions
&RegionId=cn-hangzhou
&<Common request parameters>
```

### Sample success responses

#### XML format

```
<DescribeRegionsResponse>
  <Regions>
    <RegionId>cn-hangzhou</RegionId>
    <LocalName>China (Hangzhou)</LocalName>
  </Regions>
  <RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
</DescribeRegionsResponse>
```

#### JSON format

```
{
  "Regions": [
    {
      "RegionId": "cn-hangzhou",
      "LocalName": "China (Hangzhou)"
    }
  ],
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368"
}
```

## Error codes

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

# 10.4. ListAvailableBusiRegions

Queries available acceleration regions.

## Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates a sample code of the operation for different SDKs.

## Request parameters

| Parameter     | Type   | Required | Example                  | Description                                                                                                        |
|---------------|--------|----------|--------------------------|--------------------------------------------------------------------------------------------------------------------|
| Action        | String | Yes      | ListAvailableBusiRegions | The operation that you want to perform. Set the value to <b>ListAvailableBusiRegions</b> .                         |
| RegionId      | String | Yes      | cn-hangzhou              | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> . |
| AcceleratorId | String | Yes      | ga-bp1odcab8tmno0hdq**** | The ID of the GA instance.                                                                                         |

## Response parameters

| Parameter | Type             | Example                              | Description                        |
|-----------|------------------|--------------------------------------|------------------------------------|
| RequestId | String           | DE77A7F3-3B74-41C0-A5BC-CAFD188C28B6 | The ID of the request.             |
| Regions   | Array of Regions |                                      | The information about the regions. |
| LocalName | String           | China (Qingdao)                      | The name of the region.            |
| RegionId  | String           | cn-qingdao                           | The ID of the region.              |

## Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ListAvailableBusiRegions
&RegionId=cn-hangzhou
&AcceleratorId=ga-bp1odcab8tmno0hdq****
&<Common request parameters>
```

### Sample responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<ListAvailableBusiRegionsResponse>
  <RequestId>DE77A7F3-3B74-41C0-A5BC-CAFD188C28B6</RequestId>
  <Regions>
    <LocalName>China (Qingdao)</LocalName>
    <RegionId>cn-qingdao</RegionId>
  </Regions>
</ListAvailableBusiRegionsResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "DE77A7F3-3B74-41C0-A5BC-CAFD188C28B6",
  "Regions": [{
    "LocalName": "China (Qingdao)",
    "RegionId": "cn-qingdao"
  }]
}
```

## Error codes

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

# 11.Forwarding rules

## 11.1. CreateForwardingRules

Creates a forwarding rule.

### Background information

HTTP or HTTPS listeners of Global Accelerator (GA) support domain-based and path-based forwarding rules. When HTTPS or HTTP listeners receive requests that are destined for different domain names or paths, the requests are forwarded to endpoint groups based on forwarding rules. Before you call the `CreateForwardingRules` operation, we recommend that you understand the forwarding conditions of forwarding rules. For more information, see [Configure forwarding rules](#).

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

### Request parameters

| Parameter     | Type   | Required | Example               | Description                                                                                                                                                                                                                                                                         |
|---------------|--------|----------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action        | String | Yes      | CreateForwardingRules | The operation that you want to perform. Set the value to <b>CreateForwardingRules</b> .                                                                                                                                                                                             |
| RegionId      | String | Yes      | cn-hangzhou           | The ID of the region where the GA instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                                       |
| ClientToken   | String | No       | 02fb3da4****          | The client token that is used to ensure the idempotence of the request.<br><br>You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can only contain ASCII characters and cannot exceed 64 characters in length. |
| AcceleratorId | String | Yes      | ga-bp17frjjh0udz4q**  | The ID of the GA instance.                                                                                                                                                                                                                                                          |
| ListenerId    | String | Yes      | lsr-bp1s0vzbi5bxx5*** | The ID of the listener.                                                                                                                                                                                                                                                             |

| Parameter         | Type            | Required | Example      | Description                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------|-----------------|----------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ForwardingRules   | Array           | Yes      |              | The configuration of the forwarding rules.                                                                                                                                                                                                                                                                                                                                                                      |
| Priority          | Integer         | No       | 1000         | <p>The order of the forwarding rule.</p> <div>  <b>Note</b> This parameter is not in effect. This parameter specifies only the order of the forwarding rule that appears in the GA console. </div>                                                                                                                            |
| RuleConditions    | Array           | Yes      |              | The conditions that trigger the forwarding rule.                                                                                                                                                                                                                                                                                                                                                                |
| RuleConditionType | String          | No       | Host         | <p>The type of the forwarding condition. Valid values:</p> <ul style="list-style-type: none"> <li><b>Host</b>: Requests are forwarded based on domain names.</li> <li><b>Path</b>: Requests are forwarded based on paths.</li> </ul>                                                                                                                                                                            |
| PathConfig        | Object          | No       |              | The configuration of the path.                                                                                                                                                                                                                                                                                                                                                                                  |
| Values            | Array of String | No       | /test        | <p>The path.</p> <p>The path must be 1 to 128 characters in length and must start with a forward slash (/). The path can contain letters, digits, dollar signs (\$), hyphens (-), underscores (_), periods (.), plus signs (+), forward slashes (/), ampersands (&amp;), tildes (~), at signs (@), colons (:), and apostrophes ('). Supported wildcard characters are asterisks (*) and question marks (?).</p> |
| HostConfig        | Object          | No       |              | The configuration of the domain name.                                                                                                                                                                                                                                                                                                                                                                           |
| Values            | Array of String | No       | www.test.com | <p>The domain name.</p> <p>The domain name must be 3 to 128 characters in length and can contain letters, digits, hyphens (-), and periods (.). Supported wildcard characters are asterisks (*) and question marks (?).</p>                                                                                                                                                                                     |

| Parameter          | Type    | Required | Example               | Description                                                                                                                                                                                                                                         |
|--------------------|---------|----------|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RuleActions        | Array   | Yes      |                       | The forwarding action.                                                                                                                                                                                                                              |
| Order              | Integer | Yes      | 20                    | The forwarding order. <div>  <b>Note</b> This parameter is not in effect because a forwarding rule can be associated only with one endpoint group.         </div> |
| RuleActionType     | String  | Yes      | ForwardGroup          | The type of the forwarding action. Default value: <b>ForwardGroup</b> .                                                                                                                                                                             |
| ForwardGroupConfig | Object  | Yes      |                       | The configuration for forwarding.                                                                                                                                                                                                                   |
| ServerGroupTuples  | Array   | Yes      |                       | The configuration of the endpoint group.                                                                                                                                                                                                            |
| EndpointGroupId    | String  | Yes      | epg-bp1ieei9664r5nv** | The ID of the endpoint group.                                                                                                                                                                                                                       |
| ForwardingRuleName | String  | No       | test                  | The name of the forwarding rule.<br>The name must be 2 to 128 characters in length, and can contain letters, digits, periods (.), underscores (_), and hyphens (-). The name must start with a letter.                                              |

## Response parameters

| Parameter        | Type                     | Example                              | Description                                |
|------------------|--------------------------|--------------------------------------|--------------------------------------------|
| RequestId        | String                   | 64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF | The ID of the request.                     |
| ForwardingRules  | Array of ForwardingRules |                                      | The information about the forwarding rule. |
| ForwardingRuleId | String                   | frule-bp1dii16gu9qdvb34***           | The ID of the forwarding rule.             |

## Examples

### Sample requests

```

http(s)://[Endpoint]/?Action=CreateForwardingRules
&RegionId=cn-hangzhou
&ClientToken=02fb3da4****
&AcceleratorId=ga-bp17frjjh0udz4q****
&ListenerId=lsr-bp1s0vzbi5bxx5****
&ForwardingRules=[{"Priority":1000,"RuleConditions":[{"RuleConditionType":"Host","PathConfig":{"Values":["/test"]},"HostConfig":{"Values":["www.test.com"]}}],"RuleActions":[{"Order":20,"RuleActionType":"ForwardGroup","ForwardGroupConfig":{"ServerGroupTuples":[{"EndpointGroupId":"epg-bp1ieei9664r5nv****"}]}],"ForwardingRuleName":"test"}]
&<Common request parameters>

```

### Sample success responses

#### XML format

```

HTTP/1.1 200 OK
Content-Type:application/xml
<CreateForwardingRulesResponse>
  <RequestId>64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF</RequestId>
  <ForwardingRules>
    <ForwardingRuleId>frule-bp1dii16gu9qdvb34****</ForwardingRuleId>
  </ForwardingRules>
</CreateForwardingRulesResponse>

```

#### JSON format

```

HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF",
  "ForwardingRules": [ {
    "ForwardingRuleId": "frule-bp1dii16gu9qdvb34****"
  } ]
}

```

## Error codes

| HTTP status code | Error code           | Error message                            | Description                                                                  |
|------------------|----------------------|------------------------------------------|------------------------------------------------------------------------------|
| 400              | NotExist.Listener    | The listener does not exist.             | The error message returned because the specified listener does not exist.    |
| 400              | NotActive.Listener   | The state of the listener is not active. | The error message returned because the specified listener is unstable.       |
| 400              | NotExist.Accelerator | The accelerated instance does not exist. | The error message returned because the specified GA instance does not exist. |

| HTTP status code | Error code                        | Error message                                     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------|-----------------------------------|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 400              | StateError.Accelerator            | The state of the accelerated instance is invalid. | The error message returned because the specified GA instance is invalid.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 400              | NotExist.BusinessRegion           | The business region does not exist.               | The error message returned because the specified region does not exist.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 400              | NotExist.BasicBandwidthPackage    | You must specify the basic bandwidth package.     | The error message returned because the required basic bandwidth plan is not specified.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 400              | QuotaExceeded.Endpoint            | The maximum number of endpoints is exceeded.      | The error message returned because the number of endpoints reached the upper limit.                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 400              | Exist.EndpointGroup               | The endpoint group already exists.                | The error message returned because the specified endpoint group exists.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 400              | NoPermission.VpcEndpoint          | You are not authorized to perform the operation.  | The error message returned because you are unauthorized to create the service-linked role. Contact the owner of the Alibaba Cloud account or the administrator to grant the user the AliyunGlobalAccelerationFullAccess permission or required custom permissions. The custom permissions allow you to create the service-linked role. A custom permission policy contains the following content: 1. Service name: vpcendpoint.ga.aliyuncs.com. 2. Service-linked role: AliyunServiceRoleForGaVpcEndpoint. 3. Required permission: ram:CreateServiceLinkedRole. |
| 400              | QuotaExceeded.ForwardingRule      | The number of forwarding rules exceeds the limit. | The error message returned because the number of forwarding rules reached the upper limit.                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 400              | QuotaExceeded.RuleConditionConfig | The numbers of paths and hosts exceed the limits. | The error message returned because the numbers of paths and domain names reached the upper limits.                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

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

## 11.2. UpdateForwardingRules

Updates a forwarding rule.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

### Request parameters

| Parameter       | Type   | Required | Example               | Description                                                                                                                                                                                                                                                                      |
|-----------------|--------|----------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action          | String | Yes      | UpdateForwardingRules | The operation that you want to perform. Set the value to <b>UpdateForwardingRules</b> .                                                                                                                                                                                          |
| RegionId        | String | Yes      | cn-hangzhou           | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                               |
| ClientToken     | String | No       | 02fb3da4****          | The client token that is used to ensure the idempotence of the request.<br><br>You can use the client to generate the value. Make sure that the value is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length. |
| AcceleratorId   | String | Yes      | ga-bp17frjjh0udz4q**  | The ID of the GA instance.                                                                                                                                                                                                                                                       |
| ListenerId      | String | Yes      | lsr-bp1s0vzbi5bxx5*** | The ID of the listener.                                                                                                                                                                                                                                                          |
| ForwardingRules | Array  | Yes      |                       | The configurations that you want to apply to the forwarding rule.                                                                                                                                                                                                                |

| Parameter         | Type            | Required | Example      | Description                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------|-----------------|----------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Priority          | Integer         | Yes      | 1000         | <p>The order of the forwarding rule.</p> <div>  <b>Note</b> This parameter only specifies the order in which the forwarding rule is displayed in the console and does not specify the priority of the forwarding rule. </div>                                                                                                 |
| RuleConditions    | Array           | Yes      |              | The conditions that trigger the forwarding rule.                                                                                                                                                                                                                                                                                                                                                                |
| RuleConditionType | String          | Yes      | Host         | <p>The type of the forwarding condition. Valid values:</p> <ul style="list-style-type: none"> <li><b>Host</b>: Requests are forwarded based on domain names.</li> <li><b>Path</b>: Requests are forwarded based on paths.</li> </ul>                                                                                                                                                                            |
| PathConfig        | Object          | No       |              | The path configuration.                                                                                                                                                                                                                                                                                                                                                                                         |
| Values            | Array of String | No       | /test        | <p>The path.</p> <p>The path must be 1 to 128 characters in length and must start with a forward slash (/). The path can contain letters, digits, dollar signs (\$), hyphens (-), underscores (_), periods (.), plus signs (+), forward slashes (/), ampersands (&amp;), tildes (~), at signs (@), colons (:), and apostrophes ('). Supported wildcard characters are asterisks (*) and question marks (?).</p> |
| HostConfig        | Object          | No       |              | The domain name configuration.                                                                                                                                                                                                                                                                                                                                                                                  |
| Values            | Array of String | No       | www.test.com | <p>The domain name.</p> <p>The domain name must be 3 to 128 characters in length and can contain letters, digits, hyphens (-), and periods (.). Supported wildcard characters are asterisks (*) and question marks (?).</p>                                                                                                                                                                                     |
| RuleActions       | Array           | Yes      |              | The forwarding action.                                                                                                                                                                                                                                                                                                                                                                                          |

| Parameter          | Type    | Required | Example                     | Description                                                                                                                                                                                                                                            |
|--------------------|---------|----------|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Order              | Integer | Yes      | 2                           | <p>The forwarding order.</p> <div>  <b>Note</b> This parameter does not take effect because a forwarding rule can be associated with only one endpoint group. </div> |
| RuleActionType     | String  | Yes      | ForwardGroup                | The type of the forwarding action. Default value: <b>ForwardGroup</b> .                                                                                                                                                                                |
| ForwardGroupConfig | Object  | Yes      |                             | The forwarding configuration.                                                                                                                                                                                                                          |
| ServerGroupTuples  | Array   | Yes      |                             | The configuration of the endpoint group.                                                                                                                                                                                                               |
| EndpointGroupId    | String  | Yes      | epg-bp1ieei9664r5nv**       | The ID of the endpoint group.                                                                                                                                                                                                                          |
| ForwardingRuleId   | String  | Yes      | frule-bp1dii16gu9qdvb34**** | The ID of the forwarding rule.                                                                                                                                                                                                                         |
| ForwardingRuleName | String  | No       | test                        | <p>The name of the forwarding rule.</p> <p>The name must be 2 to 128 characters in length and can contain letters, digits, periods (.), underscores (_), and hyphens (-). The name must start with a letter.</p>                                       |

## Response parameters

| Parameter        | Type                     | Example                              | Description                                |
|------------------|--------------------------|--------------------------------------|--------------------------------------------|
| ForwardingRules  | Array of ForwardingRules |                                      | The information about the forwarding rule. |
| ForwardingRuleId | String                   | frule-bp1dii16gu9qdvb34****          | The ID of the forwarding rule.             |
| RequestId        | String                   | 64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF | The ID of the request.                     |

## Examples

## Sample requests

```
http(s)://[Endpoint]?Action=UpdateForwardingRules
&RegionId=cn-hangzhou
&ClientToken=02fb3da4****
&AcceleratorId=ga-bp17frjjh0udz4q****
&ListenerId=lsr-bp1s0vzbi5bxx5****
&ForwardingRules=[{"Priority":1000,"RuleConditions":[{"RuleConditionType":"Host","PathConfig":{"Values":["/test"]},"HostConfig":{"Values":["www.test.com"]}}],"RuleActions":[{"Order":2,"RuleActionType":"ForwardGroup","ForwardGroupConfig":{"ServerGroupTuples":[{"EndpointGroupId":"epg-bp1ieei9664r5nv****"}]}],"ForwardingRuleId":"frule-bp1dii16gu9qdvb34****","ForwardingRuleName":"test"}]
&<Common request parameters>
```

## Sample success responses

## XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<UpdateForwardingRulesResponse>
  <ForwardingRules>
    <ForwardingRuleId>frule-bp1dii16gu9qdvb34****</ForwardingRuleId>
  </ForwardingRules>
  <RequestId>64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF</RequestId>
</UpdateForwardingRulesResponse>
```

## JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "ForwardingRules": [ {
    "ForwardingRuleId": "frule-bp1dii16gu9qdvb34****"
  } ],
  "RequestId": "64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF"
}
```

## Error codes

| HTTP status code | Error code           | Error message                            | Description                                                                         |
|------------------|----------------------|------------------------------------------|-------------------------------------------------------------------------------------|
| 400              | NotExist.Listener    | The listener does not exist.             | The error message returned because the specified listener does not exist.           |
| 400              | NotActive.Listener   | The state of the listener is not active. | The error message returned because the specified listener is in an unstable status. |
| 400              | NotExist.Accelerator | The accelerated instance does not exist. | The error message returned because the specified GA instance does not exist.        |

| HTTP status code | Error code                        | Error message                                     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------|-----------------------------------|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 400              | StateError.Accelerator            | The state of the accelerated instance is invalid. | The error message returned because the specified GA instance is in an invalid status.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 400              | NotExist.BusinessRegion           | The business region does not exist.               | The error message returned because the specified region does not exist.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 400              | NotExist.BasicBandwidthPackage    | You must specify the basic bandwidth package.     | The error message returned because the required basic bandwidth plan is not specified.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 400              | QuotaExceeded.Endpoint            | The maximum number of endpoints is exceeded.      | The error message returned because the number of endpoints has reached the upper limit.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 400              | Exist.EndpointGroup               | The endpoint group already exists.                | The error message returned because the specified endpoint group already exists.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 400              | NoPermission.VpcEndpoint          | You are not authorized to perform the operation.  | The error message returned because you are not authorized to create the service-linked role. Contact the owner of the Alibaba Cloud account or the permission administrator to grant the current user the <code>AliyunGlobalAccelerationFullAccess</code> permission or custom permissions. The custom permissions must allow you to create the service-linked role. Configure the following information to customize a permission policy: 1. Set the service name to <code>vpcendpoint.ga.aliyuncs.com</code> . 2. Set the name of the service-linked role to <code>AliyunServiceRoleForGaVpcEndpoint</code> . 3. Set the required permissions to <code>ram:CreateServiceLinkedRole</code> . |
| 400              | QuotaExceeded.RuleConditionConfig | The number of path and host exceeds the limit.    | The error message returned because the number of paths and domain names has reached the upper limit.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

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

## 11.3. ListForwardingRules

Queries forwarding rules.

 **Note** You can call this operation to query only custom forwarding rules. The default forwarding rule cannot be queried.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

### Request parameters

| Parameter        | Type   | Required | Example                   | Description                                                                                                                                                                                                                                                                         |
|------------------|--------|----------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action           | String | Yes      | ListForwardingRules       | The operation that you want to perform. Set the value to <b>ListForwardingRules</b> .                                                                                                                                                                                               |
| RegionId         | String | Yes      | cn-hangzhou               | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                  |
| ClientToken      | String | No       | 02fb3da4****              | The client token that is used to ensure the idempotence of the request.<br><br>You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can only contain ASCII characters and cannot exceed 64 characters in length. |
| ListenerId       | String | Yes      | lsr-bp1s0vzb5bxx5pw****   | The ID of the listener.                                                                                                                                                                                                                                                             |
| AcceleratorId    | String | Yes      | ga-bp17frjjh0udz4qzk****  | The ID of the GA instance.                                                                                                                                                                                                                                                          |
| ForwardingRuleId | String | No       | frule-bp19a3t3yzt21q3**** | The ID of the forwarding rule.                                                                                                                                                                                                                                                      |
| NextToken        | String | No       | FFBBOCFx****              | The token that is used to start the next query.                                                                                                                                                                                                                                     |

| Parameter  | Type    | Required | Example | Description                                                                                           |
|------------|---------|----------|---------|-------------------------------------------------------------------------------------------------------|
| MaxResults | Integer | Yes      | 2       | The maximum number of forwarding rules that can be queried.<br>Valid values: <b>1</b> to <b>100</b> . |

## Response parameters

| Parameter            | Type                     | Example                              | Description                                                                                                                                                                                                                                                              |
|----------------------|--------------------------|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RequestId            | String                   | CFC67ED9-4AB1-431F-B6E3-A752B7B8CCD4 | The ID of the request.                                                                                                                                                                                                                                                   |
| TotalCount           | Integer                  | 1                                    | The total number of forwarding rules.                                                                                                                                                                                                                                    |
| NextToken            | String                   | FFBBOCFx****                         | The token that is used to start the next query.                                                                                                                                                                                                                          |
| MaxResults           | Integer                  | 2                                    | The maximum number of forwarding rules that can be queried.                                                                                                                                                                                                              |
| ForwardingRules      | Array of ForwardingRules |                                      | The information about the forwarding rules.                                                                                                                                                                                                                              |
| Priority             | Integer                  | 5000                                 | The order of the forwarding rule.<br><br> <b>Note</b> This parameter is not in effect. This parameter indicates only the order of the forwarding rule that appears in the GA console. |
| ForwardingRuleId     | String                   | frule-bp19a3t3yzr21q3****            | The ID of the forwarding rule.                                                                                                                                                                                                                                           |
| ForwardingRuleName   | String                   | auto_named_rule                      | The name of the forwarding rule.                                                                                                                                                                                                                                         |
| ForwardingRuleStatus | String                   | active                               | The status of the forwarding rule. <ul style="list-style-type: none"> <li><b>active</b>: The forwarding rule is normal.</li> <li><b>configuring</b>: The configuration of the forwarding rule is being modified.</li> </ul>                                              |
| RuleConditions       | Array of RuleConditions  |                                      | The conditions that trigger the forwarding rule.                                                                                                                                                                                                                         |

| Parameter          | Type                 | Example         | Description                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------|----------------------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RuleConditionType  | String               | Host            | <p>The type of the forwarding condition.</p> <ul style="list-style-type: none"> <li>• <b>Host</b>: Requests are forwarded based on domain names.</li> <li>• <b>Path</b>: Requests are forwarded based on paths.</li> </ul>                                                                                                                                                                                     |
| PathConfig         | Object               |                 | The configuration of the path.                                                                                                                                                                                                                                                                                                                                                                                 |
| Values             | Array of String      | /test           | <p>The path.</p> <p>The path must be 1 to 128 characters in length and must start with a forward slash (/). The path can contain letters, digits, dollar signs (\$), hyphens (-), underscores (_), periods (.), plus signs (+), forward slashes (/), ampersands (&amp;), tildes (~), at signs (@), colons (:), and apostrophes (').Supported wildcard characters are asterisks (*) and question marks (?).</p> |
| HostConfig         | Object               |                 | The configuration of the domain name.                                                                                                                                                                                                                                                                                                                                                                          |
| Values             | Array of String      | www.example.com | <p>The domain name.</p> <p>The domain name must be 3 to 128 characters in length and can contain letters, digits, hyphens (-), and periods (.).Supported wildcard characters are asterisks (*) and question marks (?).</p>                                                                                                                                                                                     |
| RuleActions        | Array of RuleActions |                 | The forwarding action.                                                                                                                                                                                                                                                                                                                                                                                         |
| Order              | Integer              | 1               | <p>The forwarding order.</p> <div>  <b>Note</b> This parameter is not in effect because a forwarding rule can be associated only with one endpoint group. </div>                                                                                                                                                            |
| RuleActionType     | String               | ForwardGroup    | <p>The type of the forwarding action.</p> <p>Default value: <b>ForwardGroup</b>.</p>                                                                                                                                                                                                                                                                                                                           |
| ForwardGroupConfig | Object               |                 | The configuration of the forwarding action.                                                                                                                                                                                                                                                                                                                                                                    |

| Parameter         | Type                       | Example                 | Description                               |
|-------------------|----------------------------|-------------------------|-------------------------------------------|
| ServerGroupTuples | Array of ServerGroupTuples |                         | The information about the endpoint group. |
| EndpointGroupId   | String                     | epg-bp1ieei9664r5nv**** | The ID of the endpoint group.             |
| ListenerId        | String                     | lsr-bp1s0vzbi5bxx5****  | The ID of the listener.                   |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=ListForwardingRules
&RegionId=cn-hangzhou
&ClientToken=02fb3da4****
&ListenerId=lsr-bp1s0vzbi5bxx5pw****
&AcceleratorId=ga-bp17frjjh0udz4qzk****
&ForwardingRuleId=frule-bp19a3t3yzz21q3****
&NextToken=FFBBOCFx****
&MaxResults=2
&<Common request parameters>
```

### Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<ListForwardingRulesResponse>
  <RequestId>CFC67ED9-4AB1-431F-B6E3-A752B7B8CCD4</RequestId>
  <TotalCount>1</TotalCount>
  <NextToken>FFBBOCFx****</NextToken>
  <MaxResults>2</MaxResults>
  <ForwardingRules>
    <Priority>5000</Priority>
    <ForwardingRuleId>frule-bp19a3t3yzt21q3****</ForwardingRuleId>
    <ForwardingRuleName>auto_named_rule</ForwardingRuleName>
    <ForwardingRuleStatus>active</ForwardingRuleStatus>
    <RuleConditions>
      <RuleConditionType>Host</RuleConditionType>
      <PathConfig>
        <Values>/test</Values>
      </PathConfig>
      <HostConfig>
        <Values>www.example.com</Values>
      </HostConfig>
    </RuleConditions>
    <RuleActions>
      <Order>1</Order>
      <RuleActionType>ForwardGroup</RuleActionType>
      <ForwardGroupConfig>
        <ServerGroupTuples>
          <EndpointGroupId>epg-bp1ieei9664r5nv****</EndpointGroupId>
        </ServerGroupTuples>
      </ForwardGroupConfig>
    </RuleActions>
    <ListenerId>lsr-bp1s0vzbi5bxx5****</ListenerId>
  </ForwardingRules>
</ListForwardingRulesResponse>
```

JSON format

```

HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "CFC67ED9-4AB1-431F-B6E3-A752B7B8CCD4",
  "TotalCount": 1,
  "NextToken": "FFBBOCFx****",
  "MaxResults": 2,
  "ForwardingRules": [{
    "Priority": 5000,
    "ForwardingRuleId": "frule-bp19a3t3yzr21q3****",
    "ForwardingRuleName": "auto_named_rule",
    "ForwardingRuleStatus": "active",
    "RuleConditions": [{
      "RuleConditionType": "Host",
      "PathConfig": {
        "Values": ["/test"]
      },
    },
    "HostConfig": {
      "Values": ["www.example.com"]
    }
  }],
  "RuleActions": [{
    "Order": 1,
    "RuleActionType": "ForwardGroup",
    "ForwardGroupConfig": {
      "ServerGroupTuples": [{
        "EndpointGroupId": "epg-bp1ieei9664r5nv****"
      }]
    }
  }],
  "ListenerId": "lsr-bp1s0vzbi5bxx5****"
}]
}

```

## Error codes

| HTTP status code | Error code           | Error message                            | Description                                                                  |
|------------------|----------------------|------------------------------------------|------------------------------------------------------------------------------|
| 400              | NotExist.Listener    | The listener does not exist.             | The error message returned because the specified listener does not exist.    |
| 400              | NotActive.Listener   | The state of the listener is not active. | The error message returned because the specified listener is unstable.       |
| 400              | NotExist.Accelerator | The accelerated instance does not exist. | The error message returned because the specified GA instance does not exist. |

| HTTP status code | Error code                     | Error message                                     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------|--------------------------------|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 400              | StateError.Accelerator         | The state of the accelerated instance is invalid. | The error message returned because the specified GA instance is invalid.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 400              | NotExist.BusinessRegion        | The business region does not exist.               | The error message returned because the specified region does not exist.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 400              | NotExist.BasicBandwidthPackage | You must specify the basic bandwidth package.     | The error message returned because the required basic bandwidth plan is not specified.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 400              | QuotaExceeded.Endpoint         | The maximum number of endpoints is exceeded.      | The error message returned because the number of endpoints reached the upper limit.                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 400              | Exist.EndpointGroup            | The endpoint group already exists.                | The error message returned because the specified endpoint group exists.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 400              | NoPermission.VpcEndpoint       | You are not authorized to perform the operation.  | The error message returned because you are unauthorized to create the service-linked role. Contact the owner of the Alibaba Cloud account or the administrator to grant the user the AliyunGlobalAccelerationFullAccess permission or required custom permissions. The custom permissions allow you to create the service-linked role. A custom permission policy contains the following content: 1. Service name: vpcendpoint.ga.aliyuncs.com. 2. Service-linked role: AliyunServiceRoleForGaVpcEndpoint. 3. Required permission: ram:CreateServiceLinkedRole. |

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

## 11.4. DeleteForwardingRules

Deletes a forwarding rule.

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates a sample code of the operation for different SDKs.

## Request parameters

| Parameter         | Type            | Required | Example                   | Description                                                                                                                                                                                                                                                                            |
|-------------------|-----------------|----------|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action            | String          | Yes      | DeleteForwardingRules     | The operation that you want to perform. Set the value to <b>DeleteForwardingRules</b> .                                                                                                                                                                                                |
| RegionId          | String          | Yes      | cn-hangzhou               | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                     |
| ClientToken       | String          | No       | 02fb3da4****              | The client token that is used to ensure the idempotency of the request.<br><br>You can use the client to generate the value, but you must make sure that it is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length. |
| ForwardingRuleIds | Array of String | Yes      | frule-bp19a3t3yzr21q3**** | The ID of the forwarding rule.                                                                                                                                                                                                                                                         |
| AcceleratorId     | String          | Yes      | ga-bp17frjjh0udz4q**      | The ID of the GA instance.                                                                                                                                                                                                                                                             |
| ListenerId        | String          | Yes      | lsr-bp1s0vzb5bxx5*<br>*** | The ID of the listener.                                                                                                                                                                                                                                                                |

## Response parameters

| Parameter        | Type                     | Example                              | Description                                |
|------------------|--------------------------|--------------------------------------|--------------------------------------------|
| ForwardingRules  | Array of ForwardingRules |                                      | The information about the forwarding rule. |
| ForwardingRuleId | String                   | frule-bp19a3t3yzr21q3****            | The ID of the forwarding rule.             |
| RequestId        | String                   | CFC67ED9-4AB1-431F-B6E3-A752B7B8CCD4 | The ID of the request.                     |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=DeleteForwardingRules
&RegionId=cn-hangzhou
&ClientToken=02fb3da4****
&ForwardingRuleIds=["frule-bp19a3t3yzt21q3****"]
&AcceleratorId=ga-bp17frjjh0udz4q****
&ListenerId=lsr-bp1s0vzbi5b1x5****
&<Common request parameters>
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<DeleteForwardingRulesResponse>
  <ForwardingRules>
    <ForwardingRuleId>frule-bp19a3t3yzt21q3****</ForwardingRuleId>
  </ForwardingRules>
  <RequestId>CFC67ED9-4AB1-431F-B6E3-A752B7B8CCD4</RequestId>
</DeleteForwardingRulesResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "ForwardingRules": [{
    "ForwardingRuleId": "frule-bp19a3t3yzt21q3****"
  }],
  "RequestId": "CFC67ED9-4AB1-431F-B6E3-A752B7B8CCD4"
}
```

## Error codes

| HttpCode | Error code           | Error message                            | Description                                                                  |
|----------|----------------------|------------------------------------------|------------------------------------------------------------------------------|
| 400      | NotExist.Listener    | The listener does not exist.             | The error message returned because the specified listener does not exist.    |
| 400      | NotActive.Listener   | The state of the listener is not active. | The error message returned because the specified listener is unstable.       |
| 400      | NotExist.Accelerator | The accelerated instance does not exist. | The error message returned because the specified GA instance does not exist. |

| HttpCode | Error code                     | Error message                                     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------|--------------------------------|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 400      | StateError.Accelerator         | The state of the accelerated instance is invalid. | The error message returned because the specified GA instance is invalid.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 400      | NotExist.BusinessRegion        | The business region does not exist.               | The error message returned because the specified region does not exist.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 400      | NotExist.BasicBandwidthPackage | You must specify the basic bandwidth package.     | The error message returned because the required basic bandwidth plan is not specified.                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 400      | QuotaExceeded.Endpoint         | The maximum number of endpoints is exceeded.      | The error message returned because the number of endpoints has reached the upper limit.                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 400      | Exist.EndpointGroup            | The endpoint group already exists.                | The error message returned because the specified endpoint group already exists.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 400      | NoPermission.VpcEndpoint       | You are not authorized to perform the operation.  | The error message returned because you are unauthorized to create the service-linked role. Contact the owner of the Alibaba Cloud account or the permission administrator to grant the current user the AliyunGlobalAccelerationFullAccess permission or required custom permissions. The custom permissions allow you to create the service-linked role. Information about the custom permissions: ServiceName: vpcendpoint.ga.aliyuncs.com The name of the service-linked role: AliyunServiceRoleForGaVpcEndpoint Required permission: ram:CreateServiceLinkedRole |

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

# 12.Access control

## 12.1. CreateAcl

Creates an access control list (ACL).

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates a sample code of the operation for different SDKs.

### Request parameters

| Parameter        | Type   | Required | Example                            | Description                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------|--------|----------|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action           | String | Yes      | CreateAcl                          | The operation that you want to perform. Set the value to <b>CreateACL</b> .                                                                                                                                                                                                                                                                                                                                                                 |
| RegionId         | String | Yes      | cn-hangzhou                        | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                                                                                                                                                                          |
| AclName          | String | No       | test-acl                           | The name of the ACL. The name must be 2 to 128 characters in length, and can contain letters, digits, periods (.), hyphens (-) and underscores (_). It must start with a letter.                                                                                                                                                                                                                                                            |
| AddressIPVersion | String | Yes      | IPv4                               | The IP version. Valid values: <b>ipv4</b> and <b>ipv6</b> .                                                                                                                                                                                                                                                                                                                                                                                 |
| ClientToken      | String | No       | 5A2CFF0E-5718-45B5-9D4D-70B3FF3898 | <p>The client token that is used to ensure the idempotence of the request. You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length.</p> <p>If you do not specify this parameter, the system automatically uses the request ID as the client token. The ID of each request may be different.</p> |

| Parameter                      | Type    | Required | Example     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------------------------|---------|----------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DryRun                         | Boolean | No       | true        | <p>Specifies whether to precheck this request. Valid values:</p> <ul style="list-style-type: none"><li>• <b>true</b>: prechecks the request. Resources are not created. The system checks the required parameters, request format, and service limits. If the request fails the precheck, an error code is returned based on the cause of failure. If the request passes the precheck, the <b>DryRunOperation</b> error code is returned.</li><li>• <b>false</b>: sends the request. This is the default value. If the request passes the precheck, a 2XX HTTP status code is returned and the operation is performed.</li></ul> |
| AclEntries.N.Entry             | String  | No       | 10.0.1.1/24 | The IP entry that you want to add to the ACL.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| AclEntries.N.Entry Description | String  | No       | test-entry  | The description of the IP entry. The description must be 1 to 256 characters in length, and can contain letters, digits, hyphens (-), forward slashes (/), periods (.), and underscores (_).                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## Response parameters

| Parameter | Type   | Example                              | Description            |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | CEF72CEB-54B6-4AE8-B225-F876FF7BA984 | The ID of the request. |
| AclId     | String | nacl-hp34s2h0xx1ht4nwo****           | The ID of the ACL.     |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=CreateAcl
&RegionId=cn-hangzhou
&AclName=test-acl
&AddressIPVersion=IPv4/IPv6
&AclEntries=[{"Entry":"10.0.1.1/24","EntryDescription":"test-entry"}]
&ClientToken=5A2CFF0E-5718-45B5-9D4D-70B3FF3898
&DryRun=true
&<Common request parameters>
```

#### Sample success responses

##### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<CreateAclResponse>
  <RequestId>CEF72CEB-54B6-4AE8-B225-F876FF7BA984</RequestId>
  <AclId>nacl-hp34s2h0xx1ht4nwo****</AclId>
</CreateAclResponse>
```

##### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "CEF72CEB-54B6-4AE8-B225-F876FF7BA984",
  "AclId": "nacl-hp34s2h0xx1ht4nwo****"
}
```

## Error codes

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

## 12.2. UpdateAclAttribute

Modifies the attributes of an access control list (ACL).

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates a sample code of the operation for different SDKs.

### Request parameters

| Parameter | Type   | Required | Example            | Description                                                                          |
|-----------|--------|----------|--------------------|--------------------------------------------------------------------------------------|
| Action    | String | Yes      | UpdateAclAttribute | The operation that you want to perform. Set the value to <b>UpdateAclAttribute</b> . |

| Parameter   | Type    | Required | Example                    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------|---------|----------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RegionId    | String  | Yes      | cn-hangzhou                | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| AclId       | String  | Yes      | nacl-hp34s2h0xx1ht4nwo**** | ACL ID                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| AclName     | String  | Yes      | test-acl                   | The name of the ACL.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| ClientToken | String  | No       | 02fb3da4****               | The client token that is used to ensure the idempotence of the request.<br><br>You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length.                                                                                                                                                                                                                                                                                                                                      |
| DryRun      | Boolean | No       | true                       | Specifies whether to precheck this request. Valid values: <ul style="list-style-type: none"> <li><b>true</b>: prechecks the request. Resources are not created. The system checks the required parameters, request format, and service limits. If the request fails the precheck, an error code is returned based on the cause of failure. If the request passes the precheck, the <b>DryRunOperation</b> error code is returned.</li> <li><b>false</b>: sends the request. This is the default value. If the request passes the precheck, a 2XX HTTP status code is returned and the operation is performed.</li> </ul> |

## Response parameters

| Parameter | Type   | Example                              | Description            |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | 64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF | The ID of the request. |
| AclId     | String | nacl-hp34s2h0xx1ht4nwo****           | ACL ID                 |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=UpdateAclAttribute
&RegionId=cn-hangzhou
&AclId=nacl-hp34s2h0xx1ht4nwo****
&AclName=test-acl
&ClientToken=02fb3da4****
&DryRun=true
&<Common request parameters>
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<UpdateAclAttributeResponse>
  <RequestId>64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF</RequestId>
  <AclId>nacl-hp34s2h0xx1ht4nwo****</AclId>
</UpdateAclAttributeResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF",
  "AclId": "nacl-hp34s2h0xx1ht4nwo****"
}
```

## Error codes

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

# 12.3. AddEntriesToAcl

Adds an IP entry to an access control list (ACL).

## Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates a sample code of the operation for different SDKs.

## Request parameters

| Parameter | Type   | Required | Example         | Description                                                                       |
|-----------|--------|----------|-----------------|-----------------------------------------------------------------------------------|
| Action    | String | Yes      | AddEntriesToAcl | The operation that you want to perform. Set the value to <b>AddEntriesToAcl</b> . |

| Parameter                     | Type    | Required | Example                            | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------|---------|----------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RegionId                      | String  | Yes      | cn-hangzhou                        | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| AclId                         | String  | Yes      | nacl-hp34s2h0xx1ht4nwo****         | The ID of the ACL.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| ClientToken                   | String  | No       | 5A2CFF0E-5718-45B5-9D4D-70B3FF3898 | The client token that is used to ensure the idempotency of the request.<br><br>You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length.                                                                                                                                                                                                                                                                                                                               |
| DryRun                        | Boolean | No       | true                               | Specifies whether to precheck this request. Valid values: <ul style="list-style-type: none"> <li><b>true</b>: prechecks the request. Resources are not created. The system checks the required parameters, request format, and service limits. If the request fails the precheck, an error code is returned based on the cause of failure. If the request passes the precheck, the DryRunOperation error code is returned.</li> <li><b>false</b>: sends the request. This is the default value. If the request passes the precheck, a 2XX HTTP status code is returned and the operation is performed.</li> </ul> |
| AclEntries.N.Entry            | String  | No       | 10.0.1.1/24                        | The IP entry that you want to add to the ACL.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| AclEntries.N.EntryDescription | String  | No       | test-entry                         | The description of the IP entry. The description must be 1 to 256 characters in length, and can contain letters, digits, hyphens (-), forward slashes (/), periods (.), and underscores (_).                                                                                                                                                                                                                                                                                                                                                                                                                      |

## Response parameters

| Parameter | Type   | Example                              | Description            |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | 365F4154-92F6-4AE4-92F8-7FF34B540710 | The ID of the request. |
| AcId      | String | nacl-hp34s2h0xx1ht4nwo****           | ACL ID                 |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=AddEntriesToAcl
&RegionId=cn-hangzhou
&AcId=nacl-hp34s2h0xx1ht4nwo****
&AcIdEntries=[{"Entry":"10.0.1.1/24","EntryDescription":"test-entry"}]
&ClientToken=5A2CFF0E-5718-45B5-9D4D-70B3FF3898
&DryRun=true
&<Common request parameters>
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<AddEntriesToAclResponse>
  <RequestId>365F4154-92F6-4AE4-92F8-7FF34B540710</RequestId>
  <AcId>nacl-hp34s2h0xx1ht4nwo****</AcId>
</AddEntriesToAclResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "365F4154-92F6-4AE4-92F8-7FF34B540710",
  "AcId": "nacl-hp34s2h0xx1ht4nwo****"
}
```

## Error codes

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

# 12.4. RemoveEntriesFromAcl

Removes an IP entry from an access control list (ACL).

## Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates a sample code of the operation for different SDKs.

## Request parameters

| Parameter          | Type    | Required | Example                              | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------|---------|----------|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action             | String  | Yes      | RemoveEntriesFromAcl                 | The operation that you want to perform. Set the value to <b>RemoveEntriesFromAcl</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| RegionId           | String  | Yes      | cn-hangzhou                          | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| AclId              | String  | Yes      | nacl-hp34s2h0xx1ht4nwo****           | The ID of the ACL.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| ClientToken        | String  | No       | 593B0448-D13E-4C56-AC0D-FDF0FDE0E9A3 | The client token that is used to ensure the idempotency of the request.<br><br>You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length.                                                                                                                                                                                                                                                                                                                               |
| DryRun             | Boolean | No       | true                                 | Specifies whether to precheck this request. Valid values: <ul style="list-style-type: none"> <li><b>true</b>: prechecks the request. Resources are not created. The system checks the required parameters, request format, and service limits. If the request fails the precheck, an error code is returned based on the cause of failure. If the request passes the precheck, the DryRunOperation error code is returned.</li> <li><b>false</b>: sends the request. This is the default value. If the request passes the precheck, a 2XX HTTP status code is returned and the operation is performed.</li> </ul> |
| AclEntries.N.Entry | String  | No       | 10.0.1.1/24                          | The IP entry that you want to remove from the ACL.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

## Response parameters

| Parameter | Type   | Example                              | Description            |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | 64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF | The ID of the request. |
| AclId     | String | nacl-hp34s2h0xx1ht4nwo****           | ACL ID                 |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=RemoveEntriesFromAcl
&RegionId=cn-hangzhou
&AclId=nacl-hp34s2h0xx1ht4nwo****
&AclEntries=[{"Entry":"10.0.1.1/24"}]
&ClientToken=593B0448-D13E-4C56-AC0D-FDF0FDE0E9A3
&DryRun=true
&<Common request parameters>
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<RemoveEntriesFromAclResponse>
  <RequestId>64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF</RequestId>
  <AclId>nacl-hp34s2h0xx1ht4nwo****</AclId>
</RemoveEntriesFromAclResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF",
  "AclId": "nacl-hp34s2h0xx1ht4nwo****"
}
```

## Error codes

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

# 12.5. ListAcls

Queries access control lists (ACLs) of a region.

## Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

## Request parameters

| Parameter   | Type            | Required | Example                         | Description                                                                                                                                                                                                                                                                          |
|-------------|-----------------|----------|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action      | String          | Yes      | ListAcls                        | The operation that you want to perform. Set the value to <b>ListAcls</b> .                                                                                                                                                                                                           |
| RegionId    | String          | Yes      | cn-hangzhou                     | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                   |
| ClientToken | String          | No       | 02fb3da4****                    | The client token that is used to ensure the idempotence of the request.<br><br>You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can only contain ASCII characters, and cannot exceed 64 characters in length. |
| AclIds      | Array of String | No       | nacl-hp34s2h0xx1ht4nwo****      | The IDs of the ACLs that you want to query. You can specify up to 20 IDs at a time.                                                                                                                                                                                                  |
| AclName     | String          | No       | test-acl                        | The name of the ACL. You can specify up to 10 names at a time.<br><br>The name must be 2 to 128 characters in length and must start with a letter. It can contain letters, digits, periods (.), underscores (_), and hyphens (-).                                                    |
| NextToken   | String          | No       | caeba0bbb2be03f84eb48b699f0a*** | The position from which the query starts. If this parameter is left empty, the query starts from the beginning.                                                                                                                                                                      |
| MaxResults  | Integer         | No       | 50                              | The maximum number of ACLs to return. The parameter is optional. Valid values: <b>1 to 100</b> . If this parameter is left empty, the default value <b>20</b> is returned.                                                                                                           |

## Response parameters

| Parameter        | Type          | Example                              | Description                                                                                                                                                                                                                                     |
|------------------|---------------|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RequestId        | String        | 64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF | The ID of the request.                                                                                                                                                                                                                          |
| TotalCount       | Integer       | 10                                   | The total number of ACLs returned.                                                                                                                                                                                                              |
| NextToken        | String        | FFmyTO70t****                        | The position from which the query starts. If no value is returned, the query starts from the beginning.                                                                                                                                         |
| MaxResults       | Integer       | 5                                    | The maximum number of entries returned. Valid values: <b>1</b> to <b>100</b> . If this parameter is left empty, the default value <b>20</b> is returned.                                                                                        |
| Acls             | Array of Acls |                                      | The ACLs.                                                                                                                                                                                                                                       |
| AclId            | String        | nacl-hp34s2h0xx1ht4nwo****           | The ID of the ACL.                                                                                                                                                                                                                              |
| AclName          | String        | test-acl                             | The name of the ACL.                                                                                                                                                                                                                            |
| AddressIPVersion | String        | IPv4                                 | The IP version of the ACL. Valid value: <b>IPv4</b> .                                                                                                                                                                                           |
| AclStatus        | String        | Available                            | The state of the ACL. Valid values: <ul style="list-style-type: none"> <li><b>Provisioning</b>: The ACL is being created.</li> <li><b>Available</b>: The ACL is available.</li> <li><b>Configuring</b>: The ACL is being configured.</li> </ul> |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=ListAcls
&RegionId=cn-hangzhou
&ClientToken=02fb3da4****
&AclIds=["nacl-hp34s2h0xx1ht4nwo****"]
&AclName=test-acl
&NextToken=caeba0bbb2be03f84eb48b699f0a****
&MaxResults=50
&<Common request parameters>
```

### Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<ListAclsResponse>
  <RequestId>64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF</RequestId>
  <TotalCount>10</TotalCount>
  <NextToken>FFmyTO70t****</NextToken>
  <MaxResults>5</MaxResults>
  <Acls>
    <AclId>nacl-hp34s2h0xx1ht4nwo****</AclId>
    <AclName>test-acl</AclName>
    <AddressIPVersion>IPv4</AddressIPVersion>
    <AclStatus>Available</AclStatus>
  </Acls>
</ListAclsResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF",
  "TotalCount": 10,
  "NextToken": "FFmyTO70t****",
  "MaxResults": 5,
  "Acls": [ {
    "AclId": "nacl-hp34s2h0xx1ht4nwo****",
    "AclName": "test-acl",
    "AddressIPVersion": "IPv4",
    "AclStatus": "Available"
  } ]
}
```

## Error codes

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

# 12.6. GetAcl

Queries an access control list (ACL).

## Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates a sample code of the operation for different SDKs.

## Request parameters

| Parameter | Type   | Required | Example | Description                                                              |
|-----------|--------|----------|---------|--------------------------------------------------------------------------|
| Action    | String | Yes      | GetAcl  | The operation that you want to perform. Set the value to <b>GetAcl</b> . |

| Parameter | Type   | Required | Example                    | Description                                                                                                        |
|-----------|--------|----------|----------------------------|--------------------------------------------------------------------------------------------------------------------|
| RegionId  | String | Yes      | cn-hangzhou                | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> . |
| AclId     | String | Yes      | nacl-hp34s2h0xx1ht4nwo**** | The ID of the ACL.                                                                                                 |

## Response parameters

| Parameter        | Type                      | Example                              | Description                                                                                                                                                                                                                                     |
|------------------|---------------------------|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RequestId        | String                    | CEF72CEB-54B6-4AE8-B225-F876FF7BA984 | The ID of the request.                                                                                                                                                                                                                          |
| AclId            | String                    | nacl-hp34s2h0xx1ht4nwo****           | The ID of the ACL.                                                                                                                                                                                                                              |
| AddressIPVersion | String                    | IPv4                                 | The IP version of the ACL. Valid value: IPv4.                                                                                                                                                                                                   |
| AclStatus        | String                    | Available                            | The state of the ACL. Valid values: <ul style="list-style-type: none"> <li><b>Provisioning</b>: The ACL is being created.</li> <li><b>Available</b>: The ACL is available.</li> <li><b>Configuring</b>: The ACL is being configured.</li> </ul> |
| AclEntries       | Array of AclEntries       |                                      | The IP entries in the ACL. A maximum of 20 IP entries can be returned.                                                                                                                                                                          |
| Entry            | String                    | 10.0.1.1/24                          | The IP entry in the ACL.                                                                                                                                                                                                                        |
| EntryDescription | String                    | test-entry                           | The description of the IP entry. The description must be 1 to 256 characters in length, and can contain letters, digits, hyphens (-), forward slashes (/), periods (.), and underscores (_).                                                    |
| RelatedListeners | Array of RelatedListeners |                                      | The listeners that associated with the ACL.                                                                                                                                                                                                     |
| ListenerId       | String                    | lsr-bp1bpn0kn908w4nbw****            | The ID of the listener.                                                                                                                                                                                                                         |

| Parameter     | Type   | Example                  | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------|--------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AclType       | String | White                    | <p>The type of the ACL. Valid values:</p> <ul style="list-style-type: none"><li>• <b>White</b>: a whitelist. Only requests from the IP addresses or CIDR blocks in the ACL are forwarded. Whitelists are applicable to scenarios in which you want to allow only specific IP addresses to access an application. Exercise caution when you configure a whitelist. Otherwise, risks may occur. After you configure a whitelist for a listener, only requests from the IP addresses that are added to the whitelist are distributed by the listener. If the whitelist is enabled but no IP addresses are added to the ACL, the listener does not forward requests.</li><li>• <b>Black</b>: a blacklist. All requests from the IP addresses or CIDR blocks in the ACL are denied. Blacklists are applicable to scenarios in which you want to deny requests from specific IP addresses to an application. If the blacklist is enabled but no IP addresses are added to the ACL, the listener forwards all requests.</li></ul> |
| AcceleratorId | String | ga-bp1odcab8tmno0hdq**** | The ID of the GA instance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| AclName       | String | test-acl                 | The name of the ACL. The name must be 2 to 128 characters in length, and can contain letters, digits, periods (.), hyphens (-) and underscores (_). It must start with a letter.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=GetAcl
&RegionId=cn-hangzhou
&AclId=nacl-hp34s2h0xx1ht4nwo****
&<Common request parameters>
```

### Sample success responses

XML format

```

HTTP/1.1 200 OK
Content-Type:application/xml
<GetAclResponse>
  <RequestId>CEF72CEB-54B6-4AE8-B225-F876FF7BA984</RequestId>
  <AclId>nacl-hp34s2h0xx1ht4nwo****</AclId>
  <AddressIPVersion>IPv4</AddressIPVersion>
  <AclStatus>Available</AclStatus>
  <AclEntries>
    <Entry>10.0.1.1/24</Entry>
    <EntryDescription>test-entry</EntryDescription>
  </AclEntries>
  <RelatedListeners>
    <ListenerId>lsl-bp1bpn0kn908w4nbw****</ListenerId>
    <AclType>White</AclType>
    <AcceleratorId>ga-bp1odcab8tmno0hdq****</AcceleratorId>
  </RelatedListeners>
  <AclName>test-acl</AclName>
</GetAclResponse>

```

#### JSON format

```

HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "CEF72CEB-54B6-4AE8-B225-F876FF7BA984",
  "AclId": "nacl-hp34s2h0xx1ht4nwo****",
  "AddressIPVersion": "IPv4",
  "AclStatus": "Available",
  "AclEntries": [ {
    "Entry": "10.0.1.1/24",
    "EntryDescription": "test-entry"
  } ],
  "RelatedListeners": [ {
    "ListenerId": "lsl-bp1bpn0kn908w4nbw****",
    "AclType": "White",
    "AcceleratorId": "ga-bp1odcab8tmno0hdq****"
  } ],
  "AclName": "test-acl"
}

```

## Error codes

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

## 12.7. DeleteAcl

Deletes an access control list (ACL).

### Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates a sample code of the operation for different SDKs.

## Request parameters

| Parameter   | Type    | Required | Example                    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------|---------|----------|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action      | String  | Yes      | DeleteAcl                  | The operation that you want to perform. Set the value to <b>DeleteAcl</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| RegionId    | String  | Yes      | cn-hangzhou                | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| AclId       | String  | Yes      | nacl-hp34s2h0xx1ht4nwo**** | The ID of the ACL.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| ClientToken | String  | No       | 02fb3da4****               | <p>The client token that is used to ensure the idempotence of the request.</p> <p>You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length.</p>                                                                                                                                                                                                                                                                                                                                |
| DryRun      | Boolean | No       | true                       | <p>Specifies whether to precheck this request. Valid values:</p> <ul style="list-style-type: none"><li>• <b>true</b>: prechecks the request. Resources are not created. The system checks the required parameters, request format, and service limits. If the request fails the precheck, an error code is returned based on the cause of failure. If the request passes the precheck, the DryRunOperation error code is returned.</li><li>• <b>false</b>: sends the request. This is the default value. If the request passes the precheck, a 2XX HTTP status code is returned and the operation is performed.</li></ul> |

## Response parameters

| Parameter | Type   | Example                              | Description            |
|-----------|--------|--------------------------------------|------------------------|
| RequestId | String | 365F4154-92F6-4AE4-92F8-7FF34B540710 | The ID of the request. |

| Parameter | Type   | Example                            | Description        |
|-----------|--------|------------------------------------|--------------------|
| AclId     | String | nacl-<br>hp34s2h0xx1ht4nwo<br>**** | The ID of the ACL. |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=DeleteAcl
&RegionId=cn-hangzhou
&AclId=nacl-hp34s2h0xx1ht4nwo****
&ClientToken=02fb3da4****
&DryRun=true
&<Common request parameters>
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<DeleteAclResponse>
  <RequestId>365F4154-92F6-4AE4-92F8-7FF34B540710</RequestId>
  <AclId>nacl-hp34s2h0xx1ht4nwo****</AclId>
</DeleteAclResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "365F4154-92F6-4AE4-92F8-7FF34B540710",
  "AclId": "nacl-hp34s2h0xx1ht4nwo****"
}
```

## Error codes

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

# 12.8. AssociateAclsWithListener

Associates access control lists (ACLs) with a listener.

## Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

## Request parameters

| Parameter   | Type   | Required | Example                              | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------|--------|----------|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action      | String | Yes      | AssociateAclsWithListener            | The operation that you want to perform. Set the value to <b>AssociateAclsWithListener</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| RegionId    | String | Yes      | 64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF | The ID of the request.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| ListenerId  | String | Yes      | lsr-bp1bpn0kn908w4nbw****            | The ID of the listener.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| AclType     | String | Yes      | white                                | <p>The type of the ACL. Valid values:</p> <ul style="list-style-type: none"> <li>• <b>white</b>: specifies the ACL as a whitelist. Only requests from the IP addresses or CIDR blocks in the ACL are forwarded. Whitelists are suitable for scenarios in which you want to allow only specified IP addresses to access an application. If you specify the ACL as a whitelist, errors may occur. Proceed with caution. After you configure a whitelist for a listener, only requests from the IP addresses that are added to the whitelist are distributed by the listener. If the whitelist is enabled but no IP addresses are added to the ACL, the listener does not forward requests.</li> <li>• <b>Black</b>: a blacklist. All requests from the IP addresses or CIDR blocks in the ACL are denied. Blacklists are suitable for scenarios in which you want to deny requests from specific IP addresses to an application. If the blacklist is enabled but no IP addresses are added to the ACL, the listener forwards all requests.</li> </ul> |
| ClientToken | String | No       | 02fb3da4****                         | <p>The client token that is used to ensure the idempotence of the request.</p> <p>You can use the client to generate the value, but you must ensure that it is unique among different requests. The token can only contain ASCII characters, and cannot exceed 64 characters in length.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

| Parameter | Type    | Required | Example                    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------|---------|----------|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DryRun    | Boolean | No       | true                       | <p>Specifies whether only to precheck the request. Valid values:</p> <ul style="list-style-type: none"> <li><b>true</b>: prechecks the request without creating resources. The system checks the required parameters, request format, and service limits. If the request fails the precheck, the system returns an error code based on the cause of the failure. If the precheck is successful, the error code <b>DryRunOperation</b> is returned.</li> <li><b>false</b>: sends the request. If the precheck is successful, a 2xx HTTP status code is returned and the operation is performed. Default value: false.</li> </ul> |
| AclIds.N  | String  | Yes      | nacl-hp34s2h0xx1ht4nwo**** | The ID of the ACL. You can associate at most two ACLs with a listener.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

## Response parameters

| Parameter  | Type            | Example                              | Description                                                            |
|------------|-----------------|--------------------------------------|------------------------------------------------------------------------|
| RequestId  | String          | 64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF | The ID of the request.                                                 |
| AclIds     | Array of String | nacl-hp34s2h0xx1ht4nwo****           | The ID of the ACL. You can associate at most two ACLs with a listener. |
| ListenerId | String          | lsr-bp1bpn0kn908w4nbw****            | The ID of the listener.                                                |

## Examples

### Sample requests

```

http(s)://[Endpoint]/?Action=AssociateAclsWithListener
&RegionId=64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF
&AclIds=["nacl-hp34s2h0xx1ht4nwo****"]
&ListenerId=lsr-bp1bpn0kn908w4nbw****
&AclType=white
&ClientToken=02fb3da4****
&DryRun=true
&<Common request parameters>

```

### Sample success responses

## XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<AssociateAclsWithListenerResponse>
  <RequestId>64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF</RequestId>
  <AclIds>nacl-hp34s2h0xx1ht4nwo****</AclIds>
  <ListenerId>lsr-bp1bpn0kn908w4nbw****</ListenerId>
</AssociateAclsWithListenerResponse>
```

## JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "64ADAB1E-0B7F-4FD8-A404-3BECC0E9CCFF",
  "AclIds": [ "nacl-hp34s2h0xx1ht4nwo****" ],
  "ListenerId": "lsr-bp1bpn0kn908w4nbw****"
}
```

## Error codes

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

# 12.9. DissociateAclsFromListener

Disassociates access control lists (ACLs) from a listener.

## Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

## Request parameters

| Parameter  | Type   | Required | Example                    | Description                                                                                                        |
|------------|--------|----------|----------------------------|--------------------------------------------------------------------------------------------------------------------|
| Action     | String | Yes      | DissociateAclsFromListener | The operation that you want to perform. Set the value to <b>DissociateAclsFromListener</b> .                       |
| RegionId   | String | Yes      | cn-hangzhou                | The ID of the region where the Global Accelerator (GA) instance is deployed. Set the value to <b>cn-hangzhou</b> . |
| ListenerId | String | Yes      | lsr-bp1bpn0kn908w4nbw****  | The ID of the listener.                                                                                            |

| Parameter   | Type    | Required | Example                            | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------|---------|----------|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ClientToken | String  | No       | 5A2CFF0E-5718-45B5-9D4D-70B3FF3898 | <p>The client token that is used to ensure the idempotence of the request. You can use the client to generate the value, but you must make sure that it is unique among different requests. The token can contain only ASCII characters and cannot exceed 64 characters in length.</p> <p>If you do not specify this parameter, the system automatically uses the request ID as the client token. The ID of each request may be different.</p>                                                                                                                                                |
| DryRun      | Boolean | No       | true                               | <p>Specifies whether to precheck the request. Valid values:</p> <ul style="list-style-type: none"> <li><b>true</b>: prechecks the request without creating resources. The system prechecks the required parameters, request format, and service limits. If the request fails to pass the precheck, an error message is returned. If the request passes the precheck, the error code <b>DryRunOperation</b> is returned.</li> <li><b>false</b> (default): sends the request. If the request passes the precheck, a 2xx HTTP status code is returned and the operation is performed.</li> </ul> |
| AclIds.N    | String  | Yes      | nacl-hp34s2h0xx1ht4nwo****         | The IDs of the ACLs. You can disassociate at most two ACLs from a listener at a time.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

## Response parameters

| Parameter  | Type            | Example                              | Description                                                                           |
|------------|-----------------|--------------------------------------|---------------------------------------------------------------------------------------|
| RequestId  | String          | CEF72CEB-54B6-4AE8-B225-F876FF7BA984 | The ID of the request.                                                                |
| AclIds     | Array of String | nacl-hp34s2h0xx1ht4nwo****           | The IDs of the ACLs. You can disassociate at most two ACLs from a listener at a time. |
| ListenerId | String          | lsr-bp1bpn0kn908w4nbw****            | The ID of the listener.                                                               |

## Examples

### Sample requests

```
http(s)://[Endpoint]/?Action=DissociateAclsFromListener
&RegionId=cn-hangzhou
&AclIds=["nacl-hp34s2h0xx1ht4nwo****"]
&ListenerId=lsr-bp1bpn0kn908w4nbw****
&ClientToken=5A2CFF0E-5718-45B5-9D4D-70B3FF3898
&DryRun=true
&Common request parameters
```

### Sample success responses

#### XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<DissociateAclsFromListenerResponse>
  <RequestId>CEF72CEB-54B6-4AE8-B225-F876FF7BA984</RequestId>
  <AclIds>nacl-hp34s2h0xx1ht4nwo****</AclIds>
  <ListenerId>lsr-bp1bpn0kn908w4nbw****</ListenerId>
</DissociateAclsFromListenerResponse>
```

#### JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId": "CEF72CEB-54B6-4AE8-B225-F876FF7BA984",
  "AclIds": [ "nacl-hp34s2h0xx1ht4nwo****" ],
  "ListenerId": "lsr-bp1bpn0kn908w4nbw****"
}
```

## Error codes

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