

Global Accelerator

API Reference

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1 Before You Start

Welcome to the Global Accelerator API Reference. Global Accelerator allows your users around the world to access cloud applications faster through public IP addresses and highly reliable, low-latency, and secure networking services.

This document describes how to use application programming interfaces (APIs) to create, query, modify, or delete global accelerators and their related resources. For details about all supported operations, see [API Overview](#).

Before accessing global accelerators by calling APIs, get yourself familiar with Global Accelerator concepts. For details, see [Service Overview](#).

API Calling

Global Accelerator provides Representational State Transfer (REST) APIs that can be called over HTTPS. For details about API calling, see [Calling APIs](#).

Endpoints

An endpoint is the **request address** for calling an API. Endpoints vary depending on services and regions. For the endpoints of a global accelerator, see [Regions and Endpoints](#).

Constraints

- The number of global accelerators you can create is determined by your quotas. To view or increase the quota, see [Constraints](#) in the *Global Accelerator User Guide*.
- For detailed constraints, see the constraints described in specific APIs.

Concepts

- **Account**
An account is created upon successful signing up. The account has full access permissions for all of its cloud services and resources. It can be used to reset user passwords and grant user permissions. The account is a payment entity, which should not be used directly to perform routine management. For security purposes, create Identity and Access Management (IAM) users and grant them permissions for routine management.

- User

An IAM user is created by an account in IAM to use cloud services. Each IAM user has its own identity credentials (password and access keys).

API authentication requires information such as the account name, username, and password.
- Region

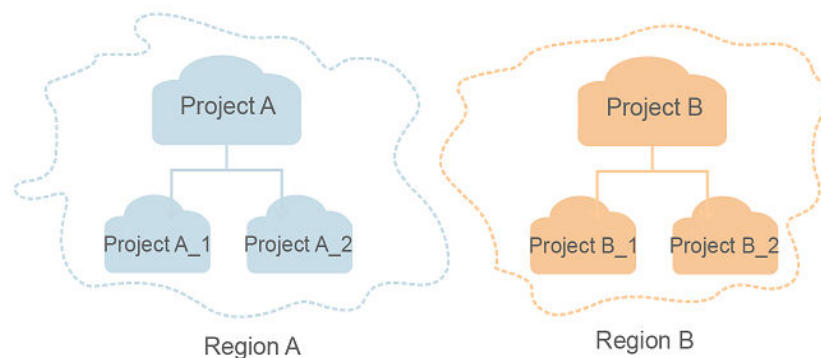
Regions are divided based on geographical location and network latency. Public services, such as Elastic Cloud Server (ECS), Elastic Volume Service (EVS), Object Storage Service (OBS), Virtual Private Cloud (VPC), Elastic IP (EIP), and Image Management Service (IMS), are shared within the same region. Regions are classified into universal regions and dedicated regions. A universal region provides universal cloud services for common tenants. A dedicated region provides specific services for specific tenants.

For details, see [Region and AZ](#).
- AZ

An AZ comprises of one or more physical data centers equipped with independent ventilation, fire, water, and electricity facilities. Computing, network, storage, and other resources in an AZ are logically divided into multiple clusters. AZs within a region are interconnected using high-speed optical fibers to allow you to build cross-AZ high-availability systems.
- Project

A project corresponds to a region. Default projects are defined to group and physically isolate resources (including computing, storage, and network resources) across regions. Users can be granted permissions in a default project to access all resources under their accounts in the region associated with the project. If you need more refined access control, create subprojects under a default project and create resources in subprojects. Then you can assign users the permissions required to access only the resources in the specific subprojects.

Figure 1-1 Project isolation model



- Enterprise Project

Enterprise projects group and manage resources across regions. Resources in different enterprise projects are logically isolated. An enterprise project can contain resources of multiple regions, and resources can be added to or removed from enterprise projects.

For details about enterprise projects and about how to obtain enterprise project IDs, see [Enterprise Management User Guide](#).

2 API Overview

Global Accelerator provides extended REST APIs.

These APIs allow you to perform operations on all the resources of Global Accelerator, including global accelerators, listeners, endpoint groups, endpoints, health checks, and regions.

Table 2-1 lists the APIs provided by Global Accelerator.

Table 2-1 Global Accelerator APIs

Resource	Description
Global accelerator	APIs for creating, updating, deleting, querying global accelerators, and querying details of a global accelerator
Listener	APIs for creating, updating, deleting, querying listeners, and querying details of a listener
Endpoint group	APIs for creating, updating, deleting, querying endpoint groups, and querying details of an endpoint group
Endpoint	APIs for creating, updating, deleting, querying endpoints, and querying details of an endpoint
Health check	APIs for creating, updating, deleting, querying health checks, and querying details of a health check
IP address group	APIs for creating, querying, updating, deleting IP address groups, and querying details of an IP address group; APIs for adding CIDR blocks to or removing CIDR blocks from an IP address group, associating an IP address group with or disassociating an IP address group from a listener
Region	APIs for querying regions
Tag	APIs for adding and deleting tags, querying tags of a specific resource, querying resources by tag, querying the number of resources by tag, querying the tag list, and more

Resource	Description
Log	APIs for creating, updating, and deleting logs, querying the log list, and querying the details of a log, and more

3 Calling APIs

3.1 Making an API Request

This section describes the structure of a REST API request, and uses the IAM API for [creating an IAM User](#) as an example to demonstrate how to call an API. The obtained token can then be used to authenticate the calling of other APIs.

Request URI

A request URI is in the following format:

{URI-scheme}://{Endpoint}/{resource-path}?{query-string}

Although a request URI is included in the request header, most programming languages or frameworks require the request URI to be transmitted separately.

Table 3-1 URI parameter description

Parameter	Description
URI-scheme	Protocol used to transmit requests. All APIs use HTTPS.
Endpoint	Domain name or IP address of the server bearing the REST service. The endpoint varies between services in different regions. It can be obtained from Regions and Endpoints . For example, the endpoint of IAM in region CN-Hong Kong is iam.ap-southeast-1.myhuaweicloud.com .
resource-path	Access path of an API for performing a specified operation. Obtain the path from the URI of an API. For example, the resource-path of the API used to obtain a user token is /v3/auth/tokens .

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

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

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

Figure 3-1 Example URI



NOTE

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

Request Methods

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

Table 3-2 HTTP methods

Method	Description
GET	Requests the server to return specified resources.
PUT	Requests the server to update specified resources.
POST	Requests the server to add resources or perform special operations.
DELETE	Requests the server to delete specified resources, for example, an object.
HEAD	Same as GET except that the server must return only the response header.

Method	Description
PATCH	Requests the server to update partial content of a specified resource. If the resource does not exist, a new resource will be created.

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

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

Request Header

You can also add additional header fields to a request, such as the fields required by a specified URI or HTTP method. For example, to request for the authentication information, add **Content-Type**, which specifies the request body type.

Common request header fields are as follows.

Table 3-3 Common request header fields

Parameter	Description	Mandatory	Example Value
Host	Specifies the server domain name and port number of the resources being requested. The value can be obtained from the URL of the service API. The value is in the format of <i>Hostname:Port number</i> . If the port number is not specified, the default port is used. The default port number for https is 443 .	No This field is mandatory for AK/SK authentication.	code.test.com or code.test.com:443
Content-Type	Specifies the type (or format) of the message body. The default value application/json is recommended. Other values of this field will be provided for specific APIs if any.	Yes	application/json
Content-Length	Specifies the length of the request body. The unit is byte.	No	3495

Parameter	Description	Mandatory	Example Value
X-Project-Id	Specifies the project ID. Obtain the project ID by following the instructions in Obtaining a Project ID .	No This field is mandatory for requests that use AK/SK authentication in the Dedicated Cloud (DeC) scenario or multi-project scenario.	e9993fc787d94b6c886cbaa340f9c0f4
X-Auth-Token	Specifies the user token. It is a response to the API for obtaining a user token (This is the only API that does not require authentication). After the request is processed, the value of X-Subject-Token in the response header is the token value.	No This field is mandatory for token authentication.	The following is part of an example token: MIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ

 **NOTE**

In addition to supporting authentication using tokens, APIs support authentication using AK/SK, which uses SDKs to sign a request. During the signature, the **Authorization** (signature authentication) and **X-Sdk-Date** (time when a request is sent) headers are automatically added in the request.

For more details, see "Authentication Using AK/SK" in [Authentication](#).

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

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

(Optional) Request Body

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

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

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

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

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

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

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

If all data required for the API request is available, you can send the request to call the API through [curl](#), [Postman](#), or coding. In the response to the API used to obtain a user token, **X-Subject-Token** is the desired user token. This token can then be used to authenticate the calling of other APIs.

3.2 Authentication

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

- Token authentication: Requests are authenticated using tokens.
- AK/SK authentication: Requests are encrypted using AK/SK pairs. AK/SK authentication is recommended because it is more secure than token authentication.

AK/SK Authentication

NOTE

- AK/SK authentication supports API requests with a body not larger than 12 MB. For API requests with a larger body, token authentication is recommended.
- The AK/SK can be either a permanent access key or a temporary access key. If it is a temporary access key, the **X-Security-Token** field must be added to the request. The value is the **security_token** of the temporary access key.

In AK/SK authentication, AK/SK is used to sign requests and the signature is then added to the requests for authentication.

- AK: access key, which is a unique identifier used together with an SK to sign requests cryptographically.
- SK: secret access key, which is used together with an AK to sign requests cryptographically. It identifies a request sender and prevents the request from being modified.

In AK/SK authentication, you can use an AK/SK to sign requests based on the signature algorithm or using the signing SDK. For details about how to sign requests and use the signing SDK, see [AK/SK Signing and Authentication Guide](#).

NOTICE

The signing SDK is only used for signing requests and is different from the SDKs provided by services.

Token Authentication

NOTE

- A token is valid for 24 hours. When using a token for authentication, cache it to avoid frequent calling.
- To avoid token expiration during an API call, ensure that the time taken to complete a call is shorter than the time left before a token expires.

A token is used to acquire temporary permissions. During API authentication using a token, the token is added to the request header to get permissions for calling the API.

You can obtain a token by calling the [Obtaining a User Token](#) API. Global Accelerator is a global service. You can obtain a global token by calling the [Obtaining User Token](#) API. When you call the API, set **auth.scope** in the request body to **domain**.

```
{
  "auth": {
    "identity": {
      "methods": [
        "password"
      ],
      "password": {
        "user": {
          "name": "username",
          "password": "*****",
          "domain": {
            "name": "domainname"
          }
        }
      }
    }
  },
  "scope": {
    "domain": {
      "name": "xxxxxxx"
    }
  }
}
```

After a token is obtained, the **X-Auth-Token** header field must be added to requests to specify the token when calling other APIs. For example, if the token is **ABCDEFJ....**, **X-Auth-Token: ABCDEFJ....** can be added to a request as follows:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users
Content-Type: application/json
X-Auth-Token: ABCDEFJ....
```


3.3 Response

Status Code

After sending a request, you will receive a response, including a status code, response header, and response body.

A status code is a group of digits, ranging from 1xx to 5xx. It indicates the status of a request. For more information, see [Status Code](#).

For example, if status code **201** is returned for calling the API used to [create an IAM user](#), the request is successful.

Response Header

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

Figure 3-2 shows the response header fields for the API used to [create an IAM user](#). The **X-Subject-Token** header field is the desired user token. This token can then be used to authenticate the calling of other APIs.

NOTE

For security purposes, you are advised to set the token in ciphertext in configuration files or environment variables and decrypt it when using it.

Figure 3-2 Header fields of the response to the request for creating an IAM user

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

(Optional) Response Body

The body of a response is often returned in a structured format (for example, JSON or XML) as specified in the **Content-Type** header field. The response body transfers content except the response header.

The following is part of the response body for the API used to [create an IAM user](#).

```
{
  "user": {
    "id": "c131886aec...",
    "name": "IAMUser",
    "description": "IAM User Description",
    "areacode": ""
  }
}
```

```
"phone": "",
"email": "****@***.com",
"status": null,
"enabled": true,
"pwd_status": false,
"access_mode": "default",
"is_domain_owner": false,
"xuser_id": "",
"xuser_type": "",
"password_expires_at": null,
"create_time": "2024-05-21T09:03:41.000000",
"domain_id": "d78cbac1.....",
"xdomain_id": "30086000.....",
"xdomain_type": "",
"default_project_id": null
}
```

If an error occurs during API calling, an error code and a message will be displayed. The following shows an error response body.

```
{
  "error_msg": "The request message format is invalid.",
  "error_code": "IMG.0001"
}
```

In the response body, **error_code** is an error code, and **error_msg** provides information about the error.

4 API

4.1 Global Accelerator

4.1.1 Querying Global Accelerators

Function

This API is used to query the global accelerators.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/accelerators

Table 4-1 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the number of resources on each page. If this parameter is not specified, the default value is 500 .

Parameter	Mandatory	Type	Description
marker	No	String	Specifies the ID of the resource from which pagination query starts, that is, the ID of the last resource on the previous page. If the parameter is not specified, only resources on the first page are queried. This parameter must be used together with limit .
page_reverse	No	Boolean	Specifies the page direction. The value can be true or false , and the default value is false . The last page in the list requested with page_reverse set to false will not contain the "next" link, and the last page in the list requested with page_reverse set to true will not contain the "previous" link.
id	No	String	Specifies the resource ID.
name	No	String	Specifies the resource name. The name can contain 0 to 64 characters. Only letters, digits, and hyphens (-) are allowed.
status	No	String	Specifies the resource status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.
enterprise_project_id	No	String	Specifies the enterprise project ID of the tenant.

Request Parameters

Table 4-2 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-3 Response body parameters

Parameter	Type	Description
accelerators	Array of AcceleratorDetail objects	Specifies the global accelerators.
page_info	PageInfo object	Specifies the pagination query information.
request_id	String	Specifies the request ID.

Table 4-4 AcceleratorDetail

Parameter	Type	Description
id	String	Specifies the global accelerator ID.
name	String	Specifies the global accelerator name. The name can contain 1 to 64 characters. Only letters, digits, and hyphens (-) are allowed.
description	String	Specifies the description about the global accelerator. The value can contain 0 to 255 characters. The following characters are not allowed: <>

Parameter	Type	Description
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.
ip_sets	Array of AccelerateIp objects	Specifies the IP addresses assigned to the global accelerator.
created_at	String	Specifies when the global accelerator was created.
updated_at	String	Specifies when the global accelerator was updated.
domain_id	String	Specifies the tenant ID.
enterprise_project_id	String	Specifies the enterprise project ID of the tenant.
flavor_id	String	Specifies the specification ID.
frozen_info	FrozenInfo object	Specifies the frozen details of cloud services or resources.
tags	Array of ResourceTag objects	Specifies the tags.

Table 4-5 AccelerateIp

Parameter	Type	Description
ip_type	String	Specifies the IP address version.
ip_address	String	Specifies the IP address.
area	String	Specifies the acceleration area. The value can be one of the following: <ul style="list-style-type: none"> ● OUTOFCM: Outside the Chinese mainland ● CM: Chinese mainland

Table 4-6 FrozenInfo

Parameter	Type	Description
status	Integer	<p>Specifies the status of a cloud service or resource. The value can be one of the following:</p> <ul style="list-style-type: none"> • 0: unfrozen/normal (The cloud service will recover after being unfrozen.) • 1: frozen (Resources and data will be retained, but the cloud service cannot be used.) • 2: deleted/terminated (Both resources and data will be cleared.)
effect	Integer	<p>Specifies the status of the resource after being frozen. The value can be one of the following:</p> <ul style="list-style-type: none"> • 1 (default): The resource is frozen and can be released. • 2: The resource is frozen and cannot be released. • 3: The resource is frozen and cannot be renewed.
scene	Array of strings	<p>Specifies the service scenario. The value can be one of the following:</p> <ul style="list-style-type: none"> • ARREAR: The cloud service is in arrears, including expiration of yearly/monthly resources and fee deduction failure of pay-per-use resources. • POLICE: The cloud service is frozen for public security. • ILLEGAL: The cloud service is frozen due to violation of laws and regulations. • VERIFY: The cloud service is frozen because the user fails to pass the real-name authentication. • PARTNER: A partner freezes their customer's resources.

Table 4-7 ResourceTag

Parameter	Type	Description
key	String	Specifies the tag key. The key must meet the following requirements: <ul style="list-style-type: none"> The key can contain 1 to 128 characters. The key can contain UTF-8 letters, digits, spaces, and the following characters:_.: =+-@ Tags starting with _sys_ are system tags and cannot be entered by tenants.
value	String	Specifies the tag value. The value must meet the following requirements: <ul style="list-style-type: none"> The value can contain 0 to 255 characters. The key can contain UTF-8 letters, digits, spaces, and the following characters:_.: =+-@ The value can be empty or null.

Table 4-8 PageInfo

Parameter	Type	Description
next_marker	String	Specifies the marker of the next page. If this parameter is left empty, the resource is on the last page.
current_count	Integer	Specifies the number of resources on the current list.

Example Requests

Querying global accelerators

```
GET https://{ga_endpoint}/v1/accelerators
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "accelerators" : [ {
    "id" : "ac1bf54f-6a23-4074-af77-800648d25bc8",
    "name" : "acceleratorName",
```



```
"description" : "accelerator description",
"status" : "ACTIVE",
"ip_sets" : [ {
  "ip_type" : "IPV4",
  "ip_address" : "208.188.100.1",
  "area" : "OUTOFCM"
} ],
"created_at" : "2019-01-08T01:21:37.151Z",
"updated_at" : "2019-01-08T01:21:37.151Z",
"domain_id" : "99a3fff0d03c428eac3678da6a7d0f24",
"enterprise_project_id" : "0aad99bc-f5f6-4f78-8404-c598d76b0ed2",
"flavor_id" : "00000000-0000-0000-0000-000000000000",
"frozen_info" : {
  "status" : 2,
  "effect" : 1,
  "scene" : [ "ARREAR", "POLICE" ]
},
"tags" : [ {
  "key" : "tagKey",
  "value" : "tagValue"
} ]
} ],
"page_info" : {
  "next_marker" : "ac1bf54f-6a23-4074-af77-800648d25bc8",
  "current_count" : 1
},
"request_id" : "915a14a6-867b-4af7-83d1-70efceb146f9"
}
```

Status Codes

Status Code	Description
200	Operation succeeded.

Error Codes

See [Error Codes](#).

4.1.2 Creating a Global Accelerator

Function

This API is used to create a global accelerator.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/accelerators

Request Parameters

Table 4-9 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-10 Request body parameters

Parameter	Mandatory	Type	Description
accelerator	Yes	CreateAcceleratorOption	Specifies the detailed information about creating a global accelerator.

Table 4-11 CreateAcceleratorOption

Parameter	Mandatory	Type	Description
name	Yes	String	Specifies the global accelerator name. The name can contain 1 to 64 characters. Only letters, digits, and hyphens (-) are allowed.
description	No	String	Specifies the description about the global accelerator. The value can contain 0 to 255 characters. The following characters are not allowed: <>
ip_sets	Yes	Array of ip_sets objects	Specifies the IP addresses assigned to the global accelerator.
enterprise_project_id	Yes	String	Specifies the enterprise project ID of the tenant. The value is 0 or a string that contains a maximum of 36 characters in UUID format with hyphens (-). 0 indicates the default enterprise project.

Parameter	Mandatory	Type	Description
tags	No	Array of ResourceTag objects	Specifies the tags.

Table 4-12 ip_sets

Parameter	Mandatory	Type	Description
ip_type	Yes	String	Specifies the IP address version. The value can be IPv4 or IPv6 .
area	Yes	String	Specifies the acceleration area. The value can be one of the following: <ul style="list-style-type: none"> • OUTOFCM: Outside the Chinese mainland • CM: Chinese mainland

Table 4-13 ResourceTag

Parameter	Mandatory	Type	Description
key	Yes	String	Specifies the tag key. The key must meet the following requirements: <ul style="list-style-type: none"> • The key can contain 1 to 128 characters. • The key can contain UTF-8 letters, digits, spaces, and the following characters: _ . : = + - @ • Tags starting with _sys_ are system tags and cannot be entered by tenants.

Parameter	Mandatory	Type	Description
value	Yes	String	<p>Specifies the tag value. The value must meet the following requirements:</p> <ul style="list-style-type: none"> • The value can contain 0 to 255 characters. • The key can contain UTF-8 letters, digits, spaces, and the following characters: _./=+-@ • The value can be empty or null.

Response Parameters

Status code: 201

Table 4-14 Response body parameters

Parameter	Type	Description
accelerator	AcceleratorDetail object	Specifies the global accelerator.
request_id	String	Specifies the request ID.

Table 4-15 AcceleratorDetail

Parameter	Type	Description
id	String	Specifies the global accelerator ID.
name	String	Specifies the global accelerator name. The name can contain 1 to 64 characters. Only letters, digits, and hyphens (-) are allowed.
description	String	Specifies the description about the global accelerator. The value can contain 0 to 255 characters. The following characters are not allowed: <>

Parameter	Type	Description
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.
ip_sets	Array of AccelerateIp objects	Specifies the IP addresses assigned to the global accelerator.
created_at	String	Specifies when the global accelerator was created.
updated_at	String	Specifies when the global accelerator was updated.
domain_id	String	Specifies the tenant ID.
enterprise_project_id	String	Specifies the enterprise project ID of the tenant.
flavor_id	String	Specifies the specification ID.
frozen_info	FrozenInfo object	Specifies the frozen details of cloud services or resources.
tags	Array of ResourceTag objects	Specifies the tags.

Table 4-16 AccelerateIp

Parameter	Type	Description
ip_type	String	Specifies the IP address version.
ip_address	String	Specifies the IP address.
area	String	Specifies the acceleration area. The value can be one of the following: <ul style="list-style-type: none"> ● OUTOFCM: Outside the Chinese mainland ● CM: Chinese mainland

Table 4-17 FrozenInfo

Parameter	Type	Description
status	Integer	<p>Specifies the status of a cloud service or resource. The value can be one of the following:</p> <ul style="list-style-type: none"> • 0: unfrozen/normal (The cloud service will recover after being unfrozen.) • 1: frozen (Resources and data will be retained, but the cloud service cannot be used.) • 2: deleted/terminated (Both resources and data will be cleared.)
effect	Integer	<p>Specifies the status of the resource after being frozen. The value can be one of the following:</p> <ul style="list-style-type: none"> • 1 (default): The resource is frozen and can be released. • 2: The resource is frozen and cannot be released. • 3: The resource is frozen and cannot be renewed.
scene	Array of strings	<p>Specifies the service scenario. The value can be one of the following:</p> <ul style="list-style-type: none"> • ARREAR: The cloud service is in arrears, including expiration of yearly/monthly resources and fee deduction failure of pay-per-use resources. • POLICE: The cloud service is frozen for public security. • ILLEGAL: The cloud service is frozen due to violation of laws and regulations. • VERIFY: The cloud service is frozen because the user fails to pass the real-name authentication. • PARTNER: A partner freezes their customer's resources.

Table 4-18 ResourceTag

Parameter	Type	Description
key	String	Specifies the tag key. The key must meet the following requirements: <ul style="list-style-type: none">• The key can contain 1 to 128 characters.• The key can contain UTF-8 letters, digits, spaces, and the following characters:_.:=+@• Tags starting with _sys_ are system tags and cannot be entered by tenants.
value	String	Specifies the tag value. The value must meet the following requirements: <ul style="list-style-type: none">• The value can contain 0 to 255 characters.• The key can contain UTF-8 letters, digits, spaces, and the following characters:_.:=+@• The value can be empty or null.

Example Requests

Creating a global accelerator outside the Chinese mainland with an IPv4 address

```
POST https://{ga_endpoint}/v1/accelerators
{
  "accelerator" : {
    "name" : "acceleratorName",
    "description" : "accelerator description",
    "ip_sets" : [ {
      "ip_type" : "IPv4",
      "area" : "OUTOFCM"
    } ],
    "enterprise_project_id" : "0aad99bc-f5f6-4f78-8404-c598d76b0ed2",
    "tags" : [ {
      "key" : "tagKey",
      "value" : "tagValue"
    } ]
  }
}
```

Example Responses

Status code: 201

Global accelerator created.

```
{
  "accelerator" : {
    "id" : "ac1bf54f-6a23-4074-af77-800648d25bc8",
    "name" : "acceleratorName",
    "description" : "accelerator description",
```

```

"status": "ACTIVE",
"ip_sets": [ {
  "ip_type": "IPV4",
  "ip_address": "208.188.100.1",
  "area": "OUTOFCM"
} ],
"created_at": "2019-01-08T01:21:37.151Z",
"updated_at": "2019-01-08T01:21:37.151Z",
"domain_id": "99a3fff0d03c428eac3678da6a7d0f24",
"enterprise_project_id": "0aad99bc-f5f6-4f78-8404-c598d76b0ed2",
"flavor_id": "00000000-0000-0000-0000-000000000000",
"frozen_info": {
  "status": 2,
  "effect": 1,
  "scene": [ "ARREAR", "POLICE" ]
},
"tags": [ {
  "key": "tagKey",
  "value": "tagValue"
} ]
},
"request_id": "915a14a6-867b-4af7-83d1-70efceb146f9"
}

```

Status Codes

Status Code	Description
201	Global accelerator created.

Error Codes

See [Error Codes](#).

4.1.3 Querying Details of a Global Accelerator

Function

This API is used to query details of a global accelerator.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/accelerators/{accelerator_id}

Table 4-19 Path Parameters

Parameter	Mandatory	Type	Description
accelerator_id	Yes	String	Specifies the global accelerator ID.

Request Parameters

Table 4-20 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-21 Response body parameters

Parameter	Type	Description
accelerator	AcceleratorDetail object	Specifies the global accelerator.
request_id	String	Specifies the request ID.

Table 4-22 AcceleratorDetail

Parameter	Type	Description
id	String	Specifies the global accelerator ID.
name	String	Specifies the global accelerator name. The name can contain 1 to 64 characters. Only letters, digits, and hyphens (-) are allowed.
description	String	Specifies the description about the global accelerator. The value can contain 0 to 255 characters. The following characters are not allowed: <>

Parameter	Type	Description
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> • ACTIVE: The resource is running. • PENDING: The status is to be determined. • ERROR: Failed to create the resource. • DELETING: The resource is being deleted.
ip_sets	Array of AccelerateIp objects	Specifies the IP addresses assigned to the global accelerator.
created_at	String	Specifies when the global accelerator was created.
updated_at	String	Specifies when the global accelerator was updated.
domain_id	String	Specifies the tenant ID.
enterprise_project_id	String	Specifies the enterprise project ID of the tenant.
flavor_id	String	Specifies the specification ID.
frozen_info	FrozenInfo object	Specifies the frozen details of cloud services or resources.
tags	Array of ResourceTag objects	Specifies the tags.

Table 4-23 AccelerateIp

Parameter	Type	Description
ip_type	String	Specifies the IP address version.
ip_address	String	Specifies the IP address.
area	String	Specifies the acceleration area. The value can be one of the following: <ul style="list-style-type: none"> • OUTOFCM: Outside the Chinese mainland • CM: Chinese mainland

Table 4-24 FrozenInfo

Parameter	Type	Description
status	Integer	<p>Specifies the status of a cloud service or resource. The value can be one of the following:</p> <ul style="list-style-type: none"> • 0: unfrozen/normal (The cloud service will recover after being unfrozen.) • 1: frozen (Resources and data will be retained, but the cloud service cannot be used.) • 2: deleted/terminated (Both resources and data will be cleared.)
effect	Integer	<p>Specifies the status of the resource after being frozen. The value can be one of the following:</p> <ul style="list-style-type: none"> • 1 (default): The resource is frozen and can be released. • 2: The resource is frozen and cannot be released. • 3: The resource is frozen and cannot be renewed.
scene	Array of strings	<p>Specifies the service scenario. The value can be one of the following:</p> <ul style="list-style-type: none"> • ARREAR: The cloud service is in arrears, including expiration of yearly/monthly resources and fee deduction failure of pay-per-use resources. • POLICE: The cloud service is frozen for public security. • ILLEGAL: The cloud service is frozen due to violation of laws and regulations. • VERIFY: The cloud service is frozen because the user fails to pass the real-name authentication. • PARTNER: A partner freezes their customer's resources.

Table 4-25 ResourceTag

Parameter	Type	Description
key	String	Specifies the tag key. The key must meet the following requirements: <ul style="list-style-type: none"> The key can contain 1 to 128 characters. The key can contain UTF-8 letters, digits, spaces, and the following characters:_.: =+-@ Tags starting with _sys_ are system tags and cannot be entered by tenants.
value	String	Specifies the tag value. The value must meet the following requirements: <ul style="list-style-type: none"> The value can contain 0 to 255 characters. The key can contain UTF-8 letters, digits, spaces, and the following characters:_.: =+-@ The value can be empty or null.

Example Requests

Querying details of a global accelerator

```
GET https://{ga_endpoint}/v1/accelerators/ac1bf54f-6a23-4074-af77-800648d25bc8
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "accelerator" : {
    "id" : "ac1bf54f-6a23-4074-af77-800648d25bc8",
    "name" : "acceleratorName",
    "description" : "accelerator description",
    "status" : "ACTIVE",
    "ip_sets" : [ {
      "ip_type" : "IPV4",
      "ip_address" : "208.188.100.1",
      "area" : "OUTOFCM"
    } ],
    "created_at" : "2019-01-08T01:21:37.151Z",
    "updated_at" : "2019-01-08T01:21:37.151Z",
    "domain_id" : "99a3fff0d03c428eac3678da6a7d0f24",
    "enterprise_project_id" : "0aad99bc-f5f6-4f78-8404-c598d76b0ed2",
    "flavor_id" : "00000000-0000-0000-0000-000000000000",
    "frozen_info" : {
      "status" : 2,
      "effect" : 1,
      "scene" : [ "ARREAR", "POLICE" ]
    }
  },
}
```

```
"tags" : [ {  
  "key" : "tagKey",  
  "value" : "tagValue"  
} ]  
,  
"request_id" : "915a14a6-867b-4af7-83d1-70efceb146f9"  
}
```

Status Codes

Status Code	Description
200	Operation succeeded.

Error Codes

See [Error Codes](#).

4.1.4 Updating a Global Accelerator

Function

This API is used to update a global accelerator.

Calling Method

For details, see [Calling APIs](#).

URI

PUT /v1/accelerators/{accelerator_id}

Table 4-26 Path Parameters

Parameter	Mandatory	Type	Description
accelerator_id	Yes	String	Specifies the global accelerator ID.

Request Parameters

Table 4-27 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-28 Request body parameters

Parameter	Mandatory	Type	Description
accelerator	Yes	UpdateAcceleratorOption	Specifies the detailed information about updating a global accelerator.

Table 4-29 UpdateAcceleratorOption

Parameter	Mandatory	Type	Description
name	No	String	Specifies the global accelerator name. The name can contain 1 to 64 characters. Only letters, digits, and hyphens (-) are allowed.
description	No	String	Specifies the description about the global accelerator. The value can contain 0 to 255 characters. The following characters are not allowed: <>

Response Parameters

Status code: 200

Table 4-30 Response body parameters

Parameter	Type	Description
accelerator	AcceleratorDetail object	Specifies the global accelerator.

Parameter	Type	Description
request_id	String	Specifies the request ID.

Table 4-31 AcceleratorDetail

Parameter	Type	Description
id	String	Specifies the global accelerator ID.
name	String	Specifies the global accelerator name. The name can contain 1 to 64 characters. Only letters, digits, and hyphens (-) are allowed.
description	String	Specifies the description about the global accelerator. The value can contain 0 to 255 characters. The following characters are not allowed: <>
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.
ip_sets	Array of AccelerateIp objects	Specifies the IP addresses assigned to the global accelerator.
created_at	String	Specifies when the global accelerator was created.
updated_at	String	Specifies when the global accelerator was updated.
domain_id	String	Specifies the tenant ID.
enterprise_project_id	String	Specifies the enterprise project ID of the tenant.
flavor_id	String	Specifies the specification ID.
frozen_info	FrozenInfo object	Specifies the frozen details of cloud services or resources.

Parameter	Type	Description
tags	Array of ResourceTag objects	Specifies the tags.

Table 4-32 Acceleratelp

Parameter	Type	Description
ip_type	String	Specifies the IP address version.
ip_address	String	Specifies the IP address.
area	String	Specifies the acceleration area. The value can be one of the following: <ul style="list-style-type: none"> • OUTOFCM: Outside the Chinese mainland • CM: Chinese mainland

Table 4-33 FrozenInfo

Parameter	Type	Description
status	Integer	Specifies the status of a cloud service or resource. The value can be one of the following: <ul style="list-style-type: none"> • 0: unfrozen/normal (The cloud service will recover after being unfrozen.) • 1: frozen (Resources and data will be retained, but the cloud service cannot be used.) • 2: deleted/terminated (Both resources and data will be cleared.)
effect	Integer	Specifies the status of the resource after being frozen. The value can be one of the following: <ul style="list-style-type: none"> • 1 (default): The resource is frozen and can be released. • 2: The resource is frozen and cannot be released. • 3: The resource is frozen and cannot be renewed.

Parameter	Type	Description
scene	Array of strings	<p>Specifies the service scenario. The value can be one of the following:</p> <ul style="list-style-type: none"> • ARREAR: The cloud service is in arrears, including expiration of yearly/monthly resources and fee deduction failure of pay-per-use resources. • POLICE: The cloud service is frozen for public security. • ILLEGAL: The cloud service is frozen due to violation of laws and regulations. • VERIFY: The cloud service is frozen because the user fails to pass the real-name authentication. • PARTNER: A partner freezes their customer's resources.

Table 4-34 ResourceTag

Parameter	Type	Description
key	String	<p>Specifies the tag key. The key must meet the following requirements:</p> <ul style="list-style-type: none"> • The key can contain 1 to 128 characters. • The key can contain UTF-8 letters, digits, spaces, and the following characters: <code>_::=+@</code> • Tags starting with <code>_sys_</code> are system tags and cannot be entered by tenants.
value	String	<p>Specifies the tag value. The value must meet the following requirements:</p> <ul style="list-style-type: none"> • The value can contain 0 to 255 characters. • The key can contain UTF-8 letters, digits, spaces, and the following characters: <code>_:./=+@</code> • The value can be empty or null.

Example Requests

Modifying the name and description of a global accelerator

```
PUT https://{ga_endpoint}/v1/accelerators/ac1bf54f-6a23-4074-af77-800648d25bc8

{
  "accelerator" : {
    "name" : "acceleratorNameNew",
    "description" : "accelerator description new"
  }
}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "accelerator" : {
    "id" : "ac1bf54f-6a23-4074-af77-800648d25bc8",
    "name" : "acceleratorNameNew",
    "description" : "accelerator description new",
    "status" : "ACTIVE",
    "ip_sets" : [ {
      "ip_type" : "IPV4",
      "ip_address" : "208.188.100.1",
      "area" : "OUTOFCM"
    } ],
    "created_at" : "2019-01-08T01:21:37.151Z",
    "updated_at" : "2019-01-08T01:21:37.151Z",
    "domain_id" : "99a3fff0d03c428eac3678da6a7d0f24",
    "enterprise_project_id" : "0aad99bc-f5f6-4f78-8404-c598d76b0ed2",
    "flavor_id" : "00000000-0000-0000-0000-000000000000",
    "frozen_info" : {
      "status" : 2,
      "effect" : 1,
      "scene" : [ "ARREAR", "POLICE" ]
    },
    "tags" : [ {
      "key" : "tagKey",
      "value" : "tagValue"
    } ]
  },
  "request_id" : "915a14a6-867b-4af7-83d1-70efceb146f9"
}
```

Status Codes

Status Code	Description
200	Operation succeeded.

Error Codes

See [Error Codes](#).

4.1.5 Deleting a Global Accelerator

Function

This API is used to delete a global accelerator.

Constraints

Before deleting the global accelerator, you must delete all listeners associated with the global accelerator.

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v1/accelerators/{accelerator_id}

Table 4-35 Path Parameters

Parameter	Mandatory	Type	Description
accelerator_id	Yes	String	Specifies the global accelerator ID.

Request Parameters

Table 4-36 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

None

Example Requests

Deleting a global accelerator

```
DELETE https://{ga_endpoint}/v1/accelerators/ac1bf54f-6a23-4074-af77-800648d25bc8
```

Example Responses

None

Status Codes

Status Code	Description
204	Global accelerator deleted.

Error Codes

See [Error Codes](#).

4.2 Listener

4.2.1 Querying Listeners

Function

This API is used to query listeners.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/listeners

Table 4-37 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the number of resources on each page. If this parameter is not specified, the default value is 500 .
marker	No	String	Specifies the ID of the resource from which pagination query starts, that is, the ID of the last resource on the previous page. If the parameter is not specified, only resources on the first page are queried. This parameter must be used together with limit .

Parameter	Mandatory	Type	Description
page_reverse	No	Boolean	Specifies the page direction. The value can be true or false , and the default value is false . The last page in the list requested with page_reverse set to false will not contain the "next" link, and the last page in the list requested with page_reverse set to true will not contain the "previous" link.
id	No	String	Specifies the resource ID.
name	No	String	Specifies the resource name. The name can contain 0 to 64 characters. Only letters, digits, and hyphens (-) are allowed.
status	No	String	Specifies the resource status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.
accelerator_id	No	String	Specifies the global accelerator ID.

Request Parameters

Table 4-38 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-39 Response body parameters

Parameter	Type	Description
listeners	Array of ListenerDetail objects	Specifies the listeners.
page_info	PageInfo object	Specifies the pagination query information.
request_id	String	Specifies the request ID.

Table 4-40 ListenerDetail

Parameter	Type	Description
id	String	Specifies the listener ID.
name	String	Specifies the listener name. The name can contain 1 to 64 characters. Only letters, digits, and hyphens (-) are allowed.
description	String	Specifies the information about the listener. The value can contain 0 to 255 characters. The following characters are not allowed: <>
protocol	String	Specifies the protocol used by the listener to forward requests.
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> • ACTIVE: The resource is running. • PENDING: The status is to be determined. • ERROR: Failed to create the resource. • DELETING: The resource is being deleted.
port_ranges	Array of PortRange objects	Specifies the port range used by the listener.

Parameter	Type	Description
client_affinity	String	Specifies the client affinity. The value can be one of the following: <ul style="list-style-type: none"> • Source IP address: Requests from the same IP address are forwarded to the same endpoint. • NONE: Requests are evenly forwarded across the endpoints.
accelerator_id	String	Specifies the ID of the global accelerator associated with the listener.
created_at	String	Specifies when the listener was added.
updated_at	String	Specifies when the listener was updated.
domain_id	String	Specifies the tenant ID.
frozen_info	FrozenInfo object	Specifies the frozen details of cloud services or resources.
tags	Array of ResourceTag objects	Specifies the tags.

Table 4-41 PortRange

Parameter	Type	Description
from_port	Integer	Specifies the start port number.
to_port	Integer	Specifies the end port number.

Table 4-42 FrozenInfo

Parameter	Type	Description
status	Integer	<p>Specifies the status of a cloud service or resource. The value can be one of the following:</p> <ul style="list-style-type: none"> • 0: unfrozen/normal (The cloud service will recover after being unfrozen.) • 1: frozen (Resources and data will be retained, but the cloud service cannot be used.) • 2: deleted/terminated (Both resources and data will be cleared.)
effect	Integer	<p>Specifies the status of the resource after being frozen. The value can be one of the following:</p> <ul style="list-style-type: none"> • 1 (default): The resource is frozen and can be released. • 2: The resource is frozen and cannot be released. • 3: The resource is frozen and cannot be renewed.
scene	Array of strings	<p>Specifies the service scenario. The value can be one of the following:</p> <ul style="list-style-type: none"> • ARREAR: The cloud service is in arrears, including expiration of yearly/monthly resources and fee deduction failure of pay-per-use resources. • POLICE: The cloud service is frozen for public security. • ILLEGAL: The cloud service is frozen due to violation of laws and regulations. • VERIFY: The cloud service is frozen because the user fails to pass the real-name authentication. • PARTNER: A partner freezes their customer's resources.

Table 4-43 ResourceTag

Parameter	Type	Description
key	String	Specifies the tag key. The key must meet the following requirements: <ul style="list-style-type: none"> The key can contain 1 to 128 characters. The key can contain UTF-8 letters, digits, spaces, and the following characters: _.:/=+-@ Tags starting with _sys_ are system tags and cannot be entered by tenants.
value	String	Specifies the tag value. The value must meet the following requirements: <ul style="list-style-type: none"> The value can contain 0 to 255 characters. The key can contain UTF-8 letters, digits, spaces, and the following characters: _.:/=+-@ The value can be empty or null.

Table 4-44 PageInfo

Parameter	Type	Description
next_marker	String	Specifies the marker of the next page. If this parameter is left empty, the resource is on the last page.
current_count	Integer	Specifies the number of resources on the current list.

Example Requests

Querying listeners

```
GET https://{ga_endpoint}/v1/listeners
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "listeners": [ {
    "id": "1b11747a-b139-492f-9692-2df0b1c87193",
    "name": "listenerName",
```

```

"description" : "listener description",
"protocol" : "TCP",
"status" : "ACTIVE",
"port_ranges" : [ {
  "from_port" : 4000,
  "to_port" : 4200
} ],
"client_affinity" : "SOURCE_IP",
"accelerator_id" : "ac1bf54f-6a23-4074-af77-800648d25bc8",
"created_at" : "2019-01-08T01:21:37.151Z",
"updated_at" : "2019-01-08T01:21:37.151Z",
"domain_id" : "99a3fff0d03c428eac3678da6a7d0f24",
"frozen_info" : {
  "status" : 2,
  "effect" : 1,
  "scene" : [ "ARREAR", "POLICE" ]
},
"tags" : [ {
  "key" : "tagKey",
  "value" : "tagValue"
} ]
} ],
"page_info" : {
  "next_marker" : "1b11747a-b139-492f-9692-2df0b1c87193",
  "current_count" : 1
},
"request_id" : "915a14a6-867b-4af7-83d1-70efceb146f9"
}

```

Status Codes

Status Code	Description
200	Operation succeeded.

Error Codes

See [Error Codes](#).

4.2.2 Adding a Listener

Function

This API is used to add a listener.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/listeners

Request Parameters

Table 4-45 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-46 Request body parameters

Parameter	Mandatory	Type	Description
listener	Yes	CreateListenerOption object	Specifies the detailed information about adding a listener.

Table 4-47 CreateListenerOption

Parameter	Mandatory	Type	Description
name	Yes	String	Specifies the listener name. The name can contain 1 to 64 characters. Only letters, digits, and hyphens (-) are allowed.
description	No	String	Specifies the information about the listener. The value can contain 0 to 255 characters. The following characters are not allowed: <>
protocol	Yes	String	Specifies the protocol used by the listener to forward requests.
port_ranges	Yes	Array of PortRange objects	Specifies the port range used by the listener.

Parameter	Mandatory	Type	Description
client_affinity	No	String	Specifies the client affinity. The value can be one of the following: <ul style="list-style-type: none"> • Source IP address: Requests from the same IP address are forwarded to the same endpoint. • NONE: Requests are evenly forwarded across the endpoints.
accelerator_id	Yes	String	Specifies the ID of the global accelerator associated with the listener.
tags	No	Array of ResourceTag objects	Specifies the tags.

Table 4-48 PortRange

Parameter	Mandatory	Type	Description
from_port	Yes	Integer	Specifies the start port number.
to_port	Yes	Integer	Specifies the end port number.

Table 4-49 ResourceTag

Parameter	Mandatory	Type	Description
key	Yes	String	Specifies the tag key. The key must meet the following requirements: <ul style="list-style-type: none"> • The key can contain 1 to 128 characters. • The key can contain UTF-8 letters, digits, spaces, and the following characters: <code>_.:=+-@</code> • Tags starting with <code>_sys_</code> are system tags and cannot be entered by tenants.

Parameter	Mandatory	Type	Description
value	Yes	String	<p>Specifies the tag value. The value must meet the following requirements:</p> <ul style="list-style-type: none"> • The value can contain 0 to 255 characters. • The key can contain UTF-8 letters, digits, spaces, and the following characters: _./=+-@ • The value can be empty or null.

Response Parameters

Status code: 201

Table 4-50 Response body parameters

Parameter	Type	Description
listener	ListenerDetail object	Specifies the detail of a listener.
request_id	String	Specifies the request ID.

Table 4-51 ListenerDetail

Parameter	Type	Description
id	String	Specifies the listener ID.
name	String	Specifies the listener name. The name can contain 1 to 64 characters. Only letters, digits, and hyphens (-) are allowed.
description	String	Specifies the information about the listener. The value can contain 0 to 255 characters. The following characters are not allowed: <>
protocol	String	Specifies the protocol used by the listener to forward requests.

Parameter	Type	Description
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> • ACTIVE: The resource is running. • PENDING: The status is to be determined. • ERROR: Failed to create the resource. • DELETING: The resource is being deleted.
port_ranges	Array of PortRange objects	Specifies the port range used by the listener.
client_affinity	String	Specifies the client affinity. The value can be one of the following: <ul style="list-style-type: none"> • Source IP address: Requests from the same IP address are forwarded to the same endpoint. • NONE: Requests are evenly forwarded across the endpoints.
accelerator_id	String	Specifies the ID of the global accelerator associated with the listener.
created_at	String	Specifies when the listener was added.
updated_at	String	Specifies when the listener was updated.
domain_id	String	Specifies the tenant ID.
frozen_info	FrozenInfo object	Specifies the frozen details of cloud services or resources.
tags	Array of ResourceTag objects	Specifies the tags.

Table 4-52 PortRange

Parameter	Type	Description
from_port	Integer	Specifies the start port number.
to_port	Integer	Specifies the end port number.

Table 4-53 FrozenInfo

Parameter	Type	Description
status	Integer	<p>Specifies the status of a cloud service or resource. The value can be one of the following:</p> <ul style="list-style-type: none"> • 0: unfrozen/normal (The cloud service will recover after being unfrozen.) • 1: frozen (Resources and data will be retained, but the cloud service cannot be used.) • 2: deleted/terminated (Both resources and data will be cleared.)
effect	Integer	<p>Specifies the status of the resource after being frozen. The value can be one of the following:</p> <ul style="list-style-type: none"> • 1 (default): The resource is frozen and can be released. • 2: The resource is frozen and cannot be released. • 3: The resource is frozen and cannot be renewed.
scene	Array of strings	<p>Specifies the service scenario. The value can be one of the following:</p> <ul style="list-style-type: none"> • ARREAR: The cloud service is in arrears, including expiration of yearly/monthly resources and fee deduction failure of pay-per-use resources. • POLICE: The cloud service is frozen for public security. • ILLEGAL: The cloud service is frozen due to violation of laws and regulations. • VERIFY: The cloud service is frozen because the user fails to pass the real-name authentication. • PARTNER: A partner freezes their customer's resources.

Table 4-54 ResourceTag

Parameter	Type	Description
key	String	Specifies the tag key. The key must meet the following requirements: <ul style="list-style-type: none"> The key can contain 1 to 128 characters. The key can contain UTF-8 letters, digits, spaces, and the following characters:_.:=-+@ Tags starting with _sys_ are system tags and cannot be entered by tenants.
value	String	Specifies the tag value. The value must meet the following requirements: <ul style="list-style-type: none"> The value can contain 0 to 255 characters. The key can contain UTF-8 letters, digits, spaces, and the following characters:_.:=-+@ The value can be empty or null.

Example Requests

Creating a listener whose protocol is TCP, start port is 4000, end port is 4200, and client affinity is source IP address

```
POST https://{ga_endpoint}/v1/listeners
{
  "listener" : {
    "name" : "listenerName",
    "description" : "listener description",
    "protocol" : "TCP",
    "port_ranges" : [ {
      "from_port" : 4000,
      "to_port" : 4200
    } ],
    "client_affinity" : "SOURCE_IP",
    "accelerator_id" : "ac1bf54f-6a23-4074-af77-800648d25bc8",
    "tags" : [ {
      "key" : "tagKey",
      "value" : "tagValue"
    } ]
  }
}
```

Example Responses

Status code: 201

Listener added.

```
{
  "listener" : {
```



```

    "id" : "1b11747a-b139-492f-9692-2df0b1c87193",
    "name" : "listenerName",
    "description" : "listener description",
    "protocol" : "TCP",
    "status" : "ACTIVE",
    "port_ranges" : [ {
      "from_port" : 4000,
      "to_port" : 4200
    } ],
    "client_affinity" : "SOURCE_IP",
    "accelerator_id" : "ac1bf54f-6a23-4074-af77-800648d25bc8",
    "created_at" : "2019-01-08T01:21:37.151Z",
    "updated_at" : "2019-01-08T01:21:37.151Z",
    "domain_id" : "99a3fff0d03c428eac3678da6a7d0f24",
    "frozen_info" : {
      "status" : 2,
      "effect" : 1,
      "scene" : [ "ARREAR", "POLICE" ]
    },
    "tags" : [ {
      "key" : "tagKey",
      "value" : "tagValue"
    } ]
  },
  "request_id" : "915a14a6-867b-4af7-83d1-70efceb146f9"
}

```

Status Codes

Status Code	Description
201	Listener added.

Error Codes

See [Error Codes](#).

4.2.3 Querying Details of a Listener

Function

This API is used to query details of a listener.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/listeners/{listener_id}

Table 4-55 Path Parameters

Parameter	Mandatory	Type	Description
listener_id	Yes	String	Specifies the listener ID.

Request Parameters

Table 4-56 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-57 Response body parameters

Parameter	Type	Description
listener	ListenerDetail object	Specifies the detail of a listener.
request_id	String	Specifies the request ID.

Table 4-58 ListenerDetail

Parameter	Type	Description
id	String	Specifies the listener ID.
name	String	Specifies the listener name. The name can contain 1 to 64 characters. Only letters, digits, and hyphens (-) are allowed.
description	String	Specifies the information about the listener. The value can contain 0 to 255 characters. The following characters are not allowed: <>
protocol	String	Specifies the protocol used by the listener to forward requests.

Parameter	Type	Description
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> • ACTIVE: The resource is running. • PENDING: The status is to be determined. • ERROR: Failed to create the resource. • DELETING: The resource is being deleted.
port_ranges	Array of PortRange objects	Specifies the port range used by the listener.
client_affinity	String	Specifies the client affinity. The value can be one of the following: <ul style="list-style-type: none"> • Source IP address: Requests from the same IP address are forwarded to the same endpoint. • NONE: Requests are evenly forwarded across the endpoints.
accelerator_id	String	Specifies the ID of the global accelerator associated with the listener.
created_at	String	Specifies when the listener was added.
updated_at	String	Specifies when the listener was updated.
domain_id	String	Specifies the tenant ID.
frozen_info	FrozenInfo object	Specifies the frozen details of cloud services or resources.
tags	Array of ResourceTag objects	Specifies the tags.

Table 4-59 PortRange

Parameter	Type	Description
from_port	Integer	Specifies the start port number.
to_port	Integer	Specifies the end port number.

Table 4-60 FrozenInfo

Parameter	Type	Description
status	Integer	<p>Specifies the status of a cloud service or resource. The value can be one of the following:</p> <ul style="list-style-type: none"> • 0: unfrozen/normal (The cloud service will recover after being unfrozen.) • 1: frozen (Resources and data will be retained, but the cloud service cannot be used.) • 2: deleted/terminated (Both resources and data will be cleared.)
effect	Integer	<p>Specifies the status of the resource after being frozen. The value can be one of the following:</p> <ul style="list-style-type: none"> • 1 (default): The resource is frozen and can be released. • 2: The resource is frozen and cannot be released. • 3: The resource is frozen and cannot be renewed.
scene	Array of strings	<p>Specifies the service scenario. The value can be one of the following:</p> <ul style="list-style-type: none"> • ARREAR: The cloud service is in arrears, including expiration of yearly/monthly resources and fee deduction failure of pay-per-use resources. • POLICE: The cloud service is frozen for public security. • ILLEGAL: The cloud service is frozen due to violation of laws and regulations. • VERIFY: The cloud service is frozen because the user fails to pass the real-name authentication. • PARTNER: A partner freezes their customer's resources.

Table 4-61 ResourceTag

Parameter	Type	Description
key	String	Specifies the tag key. The key must meet the following requirements: <ul style="list-style-type: none"> The key can contain 1 to 128 characters. The key can contain UTF-8 letters, digits, spaces, and the following characters:_.:=+@ Tags starting with _sys_ are system tags and cannot be entered by tenants.
value	String	Specifies the tag value. The value must meet the following requirements: <ul style="list-style-type: none"> The value can contain 0 to 255 characters. The key can contain UTF-8 letters, digits, spaces, and the following characters:_.:=+@ The value can be empty or null.

Example Requests

Querying details of a listener

```
GET https://{ga_endpoint}/v1/listeners/1b11747a-b139-492f-9692-2df0b1c87193
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "listener" : {
    "id" : "1b11747a-b139-492f-9692-2df0b1c87193",
    "name" : "listenerName",
    "description" : "listener description",
    "protocol" : "TCP",
    "status" : "ACTIVE",
    "port_ranges" : [ {
      "from_port" : 4000,
      "to_port" : 4200
    } ],
    "client_affinity" : "SOURCE_IP",
    "accelerator_id" : "ac1bf54f-6a23-4074-af77-800648d25bc8",
    "created_at" : "2019-01-08T01:21:37.151Z",
    "updated_at" : "2019-01-08T01:21:37.151Z",
    "domain_id" : "99a3fff0d03c428eac3678da6a7d0f24",
    "frozen_info" : {
      "status" : 2,
      "effect" : 1,
      "scene" : [ "ARREAR", "POLICE" ]
    }
  },
}
```

```
"tags" : [ {  
  "key" : "tagKey",  
  "value" : "tagValue"  
} ]  
,  
"request_id" : "915a14a6-867b-4af7-83d1-70efceb146f9"  
}
```

Status Codes

Status Code	Description
200	Operation succeeded.

Error Codes

See [Error Codes](#).

4.2.4 Updating a Listener

Function

This API is used to update a listener.

Calling Method

For details, see [Calling APIs](#).

URI

PUT /v1/listeners/{listener_id}

Table 4-62 Path Parameters

Parameter	Mandatory	Type	Description
listener_id	Yes	String	Specifies the listener ID.

Request Parameters

Table 4-63 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-64 Request body parameters

Parameter	Mandatory	Type	Description
listener	Yes	UpdateListenerOption object	Specifies the detailed information about updating a listener.

Table 4-65 UpdateListenerOption

Parameter	Mandatory	Type	Description
name	No	String	Specifies the listener name. The name can contain 1 to 64 characters. Only letters, digits, and hyphens (-) are allowed.
description	No	String	Specifies the information about the listener. The value can contain 0 to 255 characters. The following characters are not allowed: <>
port_ranges	No	Array of PortRange objects	Specifies the port range used by the listener.
client_affinity	No	String	Specifies the client affinity. The value can be one of the following: <ul style="list-style-type: none"> • Source IP address: Requests from the same IP address are forwarded to the same endpoint. • NONE: Requests are evenly forwarded across the endpoints.

Table 4-66 PortRange

Parameter	Mandatory	Type	Description
from_port	Yes	Integer	Specifies the start port number.
to_port	Yes	Integer	Specifies the end port number.

Response Parameters

Status code: 200

Table 4-67 Response body parameters

Parameter	Type	Description
listener	ListenerDetail object	Specifies the detail of a listener.
request_id	String	Specifies the request ID.

Table 4-68 ListenerDetail

Parameter	Type	Description
id	String	Specifies the listener ID.
name	String	Specifies the listener name. The name can contain 1 to 64 characters. Only letters, digits, and hyphens (-) are allowed.
description	String	Specifies the information about the listener. The value can contain 0 to 255 characters. The following characters are not allowed: <>
protocol	String	Specifies the protocol used by the listener to forward requests.

Parameter	Type	Description
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> • ACTIVE: The resource is running. • PENDING: The status is to be determined. • ERROR: Failed to create the resource. • DELETING: The resource is being deleted.
port_ranges	Array of PortRange objects	Specifies the port range used by the listener.
client_affinity	String	Specifies the client affinity. The value can be one of the following: <ul style="list-style-type: none"> • Source IP address: Requests from the same IP address are forwarded to the same endpoint. • NONE: Requests are evenly forwarded across the endpoints.
accelerator_id	String	Specifies the ID of the global accelerator associated with the listener.
created_at	String	Specifies when the listener was added.
updated_at	String	Specifies when the listener was updated.
domain_id	String	Specifies the tenant ID.
frozen_info	FrozenInfo object	Specifies the frozen details of cloud services or resources.
tags	Array of ResourceTag objects	Specifies the tags.

Table 4-69 PortRange

Parameter	Type	Description
from_port	Integer	Specifies the start port number.
to_port	Integer	Specifies the end port number.

Table 4-70 FrozenInfo

Parameter	Type	Description
status	Integer	<p>Specifies the status of a cloud service or resource. The value can be one of the following:</p> <ul style="list-style-type: none"> • 0: unfrozen/normal (The cloud service will recover after being unfrozen.) • 1: frozen (Resources and data will be retained, but the cloud service cannot be used.) • 2: deleted/terminated (Both resources and data will be cleared.)
effect	Integer	<p>Specifies the status of the resource after being frozen. The value can be one of the following:</p> <ul style="list-style-type: none"> • 1 (default): The resource is frozen and can be released. • 2: The resource is frozen and cannot be released. • 3: The resource is frozen and cannot be renewed.
scene	Array of strings	<p>Specifies the service scenario. The value can be one of the following:</p> <ul style="list-style-type: none"> • ARREAR: The cloud service is in arrears, including expiration of yearly/monthly resources and fee deduction failure of pay-per-use resources. • POLICE: The cloud service is frozen for public security. • ILLEGAL: The cloud service is frozen due to violation of laws and regulations. • VERIFY: The cloud service is frozen because the user fails to pass the real-name authentication. • PARTNER: A partner freezes their customer's resources.

Table 4-71 ResourceTag

Parameter	Type	Description
key	String	Specifies the tag key. The key must meet the following requirements: <ul style="list-style-type: none"> The key can contain 1 to 128 characters. The key can contain UTF-8 letters, digits, spaces, and the following characters:_.: =+-@ Tags starting with _sys_ are system tags and cannot be entered by tenants.
value	String	Specifies the tag value. The value must meet the following requirements: <ul style="list-style-type: none"> The value can contain 0 to 255 characters. The key can contain UTF-8 letters, digits, spaces, and the following characters:_.: =+-@ The value can be empty or null.

Example Requests

Changing the start port to 5000 and end port to 5200, retaining source IP address for client affinity, and modifying the name and description of the listener

```
PUT https://{ga_endpoint}/v1/listeners/1b11747a-b139-492f-9692-2df0b1c87193
```

```
{
  "listener" : {
    "name" : "listenerNameNew",
    "description" : "listener description new",
    "port_ranges" : [ {
      "from_port" : 5000,
      "to_port" : 5200
    } ],
    "client_affinity" : "SOURCE_IP"
  }
}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "listener" : {
    "id" : "1b11747a-b139-492f-9692-2df0b1c87193",
    "name" : "listenerNameNew",
    "description" : "listener description new",
    "protocol" : "TCP",
    "status" : "ACTIVE",
```

```
"port_ranges" : [ {  
  "from_port" : 5000,  
  "to_port" : 5200  
} ],  
"client_affinity" : "SOURCE_IP",  
"accelerator_id" : "ac1bf54f-6a23-4074-af77-800648d25bc8",  
"created_at" : "2019-01-08T01:21:37.151Z",  
"updated_at" : "2019-01-08T01:21:37.151Z",  
"domain_id" : "99a3fff0d03c428eac3678da6a7d0f24",  
"frozen_info" : {  
  "status" : 2,  
  "effect" : 1,  
  "scene" : [ "ARREAR", "POLICE" ]  
},  
"tags" : [ {  
  "key" : "tagKey",  
  "value" : "tagValue"  
} ]  
},  
"request_id" : "915a14a6-867b-4af7-83d1-70efceb146f9"  
}
```

Status Codes

Status Code	Description
200	Operation succeeded.

Error Codes

See [Error Codes](#).

4.2.5 Deleting a Listener

Function

This API is used to delete a listener.

Constraints

Before deleting the listener, you must delete all associated endpoint groups.

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v1/listeners/{listener_id}

Table 4-72 Path Parameters

Parameter	Mandatory	Type	Description
listener_id	Yes	String	Specifies the listener ID.

Request Parameters

Table 4-73 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

None

Example Requests

Deleting a listener

```
DELETE https://{ga_endpoint}/v1/listeners/1b11747a-b139-492f-9692-2df0b1c87193
```

Example Responses

None

Status Codes

Status Code	Description
204	Listener deleted.

Error Codes

See [Error Codes](#).

4.3 Endpoint Group

4.3.1 Querying Endpoint Groups

Function

This API is used to query endpoint groups.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/endpoint-groups

Table 4-74 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the number of resources on each page. If this parameter is not specified, the default value is 500 .
marker	No	String	Specifies the ID of the resource from which pagination query starts, that is, the ID of the last resource on the previous page. If the parameter is not specified, only resources on the first page are queried. This parameter must be used together with limit .
page_reverse	No	Boolean	Specifies the page direction. The value can be true or false , and the default value is false . The last page in the list requested with page_reverse set to false will not contain the "next" link, and the last page in the list requested with page_reverse set to true will not contain the "previous" link.
id	No	String	Specifies the resource ID.
name	No	String	Specifies the resource name. The name can contain 0 to 64 characters. Only letters, digits, and hyphens (-) are allowed.

Parameter	Mandatory	Type	Description
status	No	String	Specifies the resource status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.
listener_id	No	String	Specifies the listener ID.

Request Parameters

Table 4-75 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-76 Response body parameters

Parameter	Type	Description
endpoint_groups	Array of EndpointGroupDetail objects	Specifies the endpoint groups.
page_info	PageInfo object	Specifies the pagination query information.
request_id	String	Specifies the request ID.

Table 4-77 EndpointGroupDetail

Parameter	Type	Description
id	String	Specifies the endpoint group ID.
name	String	Specifies the endpoint group name. The name can contain 1 to 64 characters. Only letters, digits, and hyphens (-) are allowed.
description	String	Specifies the information about the endpoint group. The value can contain 0 to 255 characters. The following characters are not allowed: <>
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.
traffic_dial_percent	Integer	Specifies the percentage of traffic distributed to the endpoint group.
region_id	String	Specifies the region where the endpoint group belongs.
listeners	Array of Id objects	Specifies the listeners associated with the endpoint group.
created_at	String	Specifies when the endpoint group was added.
updated_at	String	Specifies when the endpoint group was updated.
domain_id	String	Specifies the tenant ID.
frozen_info	FrozenInfo object	Specifies the frozen details of cloud services or resources.

Table 4-78 Id

Parameter	Type	Description
id	String	Specifies the ID of the associated listener.

Table 4-79 FrozenInfo

Parameter	Type	Description
status	Integer	<p>Specifies the status of a cloud service or resource. The value can be one of the following:</p> <ul style="list-style-type: none"> • 0: unfrozen/normal (The cloud service will recover after being unfrozen.) • 1: frozen (Resources and data will be retained, but the cloud service cannot be used.) • 2: deleted/terminated (Both resources and data will be cleared.)
effect	Integer	<p>Specifies the status of the resource after being frozen. The value can be one of the following:</p> <ul style="list-style-type: none"> • 1 (default): The resource is frozen and can be released. • 2: The resource is frozen and cannot be released. • 3: The resource is frozen and cannot be renewed.
scene	Array of strings	<p>Specifies the service scenario. The value can be one of the following:</p> <ul style="list-style-type: none"> • ARREAR: The cloud service is in arrears, including expiration of yearly/monthly resources and fee deduction failure of pay-per-use resources. • POLICE: The cloud service is frozen for public security. • ILLEGAL: The cloud service is frozen due to violation of laws and regulations. • VERIFY: The cloud service is frozen because the user fails to pass the real-name authentication. • PARTNER: A partner freezes their customer's resources.

Table 4-80 PageInfo

Parameter	Type	Description
next_marker	String	Specifies the marker of the next page. If this parameter is left empty, the resource is on the last page.
current_count	Integer	Specifies the number of resources on the current list.

Example Requests

Querying endpoint groups

```
GET https://{ga_endpoint}/v1/endpoint-groups
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "endpoint_groups": [ {
    "id": "3a9f50bb-f041-4eac-a117-82472d8a0007",
    "name": "endpoint-group-name",
    "description": "endpoint-group description",
    "status": "ACTIVE",
    "traffic_dial_percentage": 10,
    "region_id": "ap-southeast-1",
    "listeners": [ {
      "id": "1b11747a-b139-492f-9692-2df0b1c87193"
    } ],
    "created_at": "2019-01-08T01:21:37.151Z",
    "updated_at": "2019-01-08T01:21:37.151Z",
    "domain_id": "99a3fff0d03c428eac3678da6a7d0f24",
    "frozen_info": {
      "status": 2,
      "effect": 1,
      "scene": [ "ARREAR", "POLICE" ]
    }
  } ],
  "page_info": {
    "next_marker": "3a9f50bb-f041-4eac-a117-82472d8a0007",
    "current_count": 1
  },
  "request_id": "915a14a6-867b-4af7-83d1-70efceb146f9"
}
```

Status Codes

Status Code	Description
200	Operation succeeded.

Error Codes

See [Error Codes](#).

4.3.2 Adding an Endpoint Group

Function

This API is used to add an endpoint group.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/endpoint-groups

Request Parameters

Table 4-81 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-82 Request body parameters

Parameter	Mandatory	Type	Description
endpoint_group	Yes	CreateEndpointGroupOption object	Specifies the detailed information about adding an endpoint group.

Table 4-83 CreateEndpointGroupOption

Parameter	Mandatory	Type	Description
name	Yes	String	Specifies the endpoint group name. The name can contain 1 to 64 characters. Only letters, digits, and hyphens (-) are allowed.

Parameter	Mandatory	Type	Description
description	No	String	Specifies the information about the endpoint group. The value can contain 0 to 255 characters. The following characters are not allowed: <>
traffic_dial_percentage	No	Integer	Specifies the percentage of traffic distributed to the endpoint group.
region_id	Yes	String	Specifies the region where the endpoint group belongs.
listeners	Yes	Array of id objects	Specifies the listener associated with the endpoint group. An endpoint group can have only one listener.

Table 4-84 Id

Parameter	Mandatory	Type	Description
id	Yes	String	Specifies the ID of the associated listener.

Response Parameters

Status code: 201

Table 4-85 Response body parameters

Parameter	Type	Description
endpoint_group	EndpointGroupDetail object	Specifies the endpoint group.
request_id	String	Specifies the request ID.

Table 4-86 EndpointGroupDetail

Parameter	Type	Description
id	String	Specifies the endpoint group ID.

Parameter	Type	Description
name	String	Specifies the endpoint group name. The name can contain 1 to 64 characters. Only letters, digits, and hyphens (-) are allowed.
description	String	Specifies the information about the endpoint group. The value can contain 0 to 255 characters. The following characters are not allowed: <>
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.
traffic_dial_percentage	Integer	Specifies the percentage of traffic distributed to the endpoint group.
region_id	String	Specifies the region where the endpoint group belongs.
listeners	Array of Id objects	Specifies the listeners associated with the endpoint group.
created_at	String	Specifies when the endpoint group was added.
updated_at	String	Specifies when the endpoint group was updated.
domain_id	String	Specifies the tenant ID.
frozen_info	FrozenInfo object	Specifies the frozen details of cloud services or resources.

Table 4-87 Id

Parameter	Type	Description
id	String	Specifies the ID of the associated listener.

Table 4-88 FrozenInfo

Parameter	Type	Description
status	Integer	<p>Specifies the status of a cloud service or resource. The value can be one of the following:</p> <ul style="list-style-type: none"> • 0: unfrozen/normal (The cloud service will recover after being unfrozen.) • 1: frozen (Resources and data will be retained, but the cloud service cannot be used.) • 2: deleted/terminated (Both resources and data will be cleared.)
effect	Integer	<p>Specifies the status of the resource after being frozen. The value can be one of the following:</p> <ul style="list-style-type: none"> • 1 (default): The resource is frozen and can be released. • 2: The resource is frozen and cannot be released. • 3: The resource is frozen and cannot be renewed.
scene	Array of strings	<p>Specifies the service scenario. The value can be one of the following:</p> <ul style="list-style-type: none"> • ARREAR: The cloud service is in arrears, including expiration of yearly/monthly resources and fee deduction failure of pay-per-use resources. • POLICE: The cloud service is frozen for public security. • ILLEGAL: The cloud service is frozen due to violation of laws and regulations. • VERIFY: The cloud service is frozen because the user fails to pass the real-name authentication. • PARTNER: A partner freezes their customer's resources.

Example Requests

Creating an endpoint group whose traffic dial is 10 in ap-southeast-1

```
POST https://{ga_endpoint}/v1/endpoint-groups
```

```
{
  "endpoint_group" : {
    "name" : "endpoint-group-name",
    "description" : "endpoint-group description",
    "traffic_dial_percentage" : 10,
    "region_id" : "ap-southeast-1",
    "listeners" : [ {
      "id" : "1b11747a-b139-492f-9692-2df0b1c87193"
    } ]
  }
}
```

Example Responses

Status code: 201

Endpoint group added.

```
{
  "endpoint_group" : {
    "id" : "3a9f50bb-f041-4eac-a117-82472d8a0007",
    "name" : "endpoint-group-name",
    "description" : "endpoint-group description",
    "status" : "ACTIVE",
    "traffic_dial_percentage" : 10,
    "region_id" : "ap-southeast-1",
    "listeners" : [ {
      "id" : "1b11747a-b139-492f-9692-2df0b1c87193"
    } ],
    "created_at" : "2019-01-08T01:21:37.151Z",
    "updated_at" : "2019-01-08T01:21:37.151Z",
    "domain_id" : "99a3fff0d03c428eac3678da6a7d0f24",
    "frozen_info" : {
      "status" : 2,
      "effect" : 1,
      "scene" : [ "ARREAR", "POLICE" ]
    }
  },
  "request_id" : "915a14a6-867b-4af7-83d1-70efceb146f9"
}
```

Status Codes

Status Code	Description
201	Endpoint group added.

Error Codes

See [Error Codes](#).

4.3.3 Querying Details of an Endpoint Group

Function

This API is used to query details of an endpoint group.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/endpoint-groups/{endpoint_group_id}

Table 4-89 Path Parameters

Parameter	Mandatory	Type	Description
endpoint_group_id	Yes	String	Specifies the endpoint group ID.

Request Parameters

Table 4-90 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-91 Response body parameters

Parameter	Type	Description
endpoint_group	EndpointGroupDetail object	Specifies the endpoint group.
request_id	String	Specifies the request ID.

Table 4-92 EndpointGroupDetail

Parameter	Type	Description
id	String	Specifies the endpoint group ID.

Parameter	Type	Description
name	String	Specifies the endpoint group name. The name can contain 1 to 64 characters. Only letters, digits, and hyphens (-) are allowed.
description	String	Specifies the information about the endpoint group. The value can contain 0 to 255 characters. The following characters are not allowed: <>
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.
traffic_dial_percentage	Integer	Specifies the percentage of traffic distributed to the endpoint group.
region_id	String	Specifies the region where the endpoint group belongs.
listeners	Array of Id objects	Specifies the listeners associated with the endpoint group.
created_at	String	Specifies when the endpoint group was added.
updated_at	String	Specifies when the endpoint group was updated.
domain_id	String	Specifies the tenant ID.
frozen_info	FrozenInfo object	Specifies the frozen details of cloud services or resources.

Table 4-93 Id

Parameter	Type	Description
id	String	Specifies the ID of the associated listener.

Table 4-94 FrozenInfo

Parameter	Type	Description
status	Integer	<p>Specifies the status of a cloud service or resource. The value can be one of the following:</p> <ul style="list-style-type: none"> • 0: unfrozen/normal (The cloud service will recover after being unfrozen.) • 1: frozen (Resources and data will be retained, but the cloud service cannot be used.) • 2: deleted/terminated (Both resources and data will be cleared.)
effect	Integer	<p>Specifies the status of the resource after being frozen. The value can be one of the following:</p> <ul style="list-style-type: none"> • 1 (default): The resource is frozen and can be released. • 2: The resource is frozen and cannot be released. • 3: The resource is frozen and cannot be renewed.
scene	Array of strings	<p>Specifies the service scenario. The value can be one of the following:</p> <ul style="list-style-type: none"> • ARREAR: The cloud service is in arrears, including expiration of yearly/monthly resources and fee deduction failure of pay-per-use resources. • POLICE: The cloud service is frozen for public security. • ILLEGAL: The cloud service is frozen due to violation of laws and regulations. • VERIFY: The cloud service is frozen because the user fails to pass the real-name authentication. • PARTNER: A partner freezes their customer's resources.

Example Requests

Querying details of an endpoint group

GET https://{ga_endpoint}/v1/endpoint-groups/3a9f50bb-f041-4eac-a117-82472d8a0007

Example Responses

Status code: 200

Operation succeeded.

```
{
  "endpoint_group" : {
    "id" : "3a9f50bb-f041-4eac-a117-82472d8a0007",
    "name" : "endpoint-group-name",
    "description" : "endpoint-group description",
    "status" : "ACTIVE",
    "traffic_dial_percentage" : 10,
    "region_id" : "ap-southeast-1",
    "listeners" : [ {
      "id" : "1b11747a-b139-492f-9692-2df0b1c87193"
    } ],
    "created_at" : "2019-01-08T01:21:37.151Z",
    "updated_at" : "2019-01-08T01:21:37.151Z",
    "domain_id" : "99a3fff0d03c428eac3678da6a7d0f24",
    "frozen_info" : {
      "status" : 2,
      "effect" : 1,
      "scene" : [ "ARREAR", "POLICE" ]
    }
  },
  "request_id" : "915a14a6-867b-4af7-83d1-70efceb146f9"
}
```

Status Codes

Status Code	Description
200	Operation succeeded.

Error Codes

See [Error Codes](#).

4.3.4 Updating an Endpoint Group

Function

This API is used to update an endpoint group.

Calling Method

For details, see [Calling APIs](#).

URI

PUT /v1/endpoint-groups/{endpoint_group_id}

Table 4-95 Path Parameters

Parameter	Mandatory	Type	Description
endpoint_group_id	Yes	String	Specifies the endpoint group ID.

Request Parameters

Table 4-96 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-97 Request body parameters

Parameter	Mandatory	Type	Description
endpoint_group	Yes	UpdateEndpointGroupOption object	Specifies the detailed information about updating an endpoint group.

Table 4-98 UpdateEndpointGroupOption

Parameter	Mandatory	Type	Description
name	No	String	Specifies the endpoint group name. The name can contain 1 to 64 characters. Only letters, digits, and hyphens (-) are allowed.
description	No	String	Specifies the information about the endpoint group. The value can contain 0 to 255 characters. The following characters are not allowed: <>
traffic_distribution_percentage	No	Integer	Specifies the percentage of traffic distributed to the endpoint group.

Response Parameters

Status code: 200

Table 4-99 Response body parameters

Parameter	Type	Description
endpoint_group	EndpointGroupDetail object	Specifies the endpoint group.
request_id	String	Specifies the request ID.

Table 4-100 EndpointGroupDetail

Parameter	Type	Description
id	String	Specifies the endpoint group ID.
name	String	Specifies the endpoint group name. The name can contain 1 to 64 characters. Only letters, digits, and hyphens (-) are allowed.
description	String	Specifies the information about the endpoint group. The value can contain 0 to 255 characters. The following characters are not allowed: <>
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.
traffic_dial_percent	Integer	Specifies the percentage of traffic distributed to the endpoint group.
region_id	String	Specifies the region where the endpoint group belongs.
listeners	Array of Id objects	Specifies the listeners associated with the endpoint group.
created_at	String	Specifies when the endpoint group was added.
updated_at	String	Specifies when the endpoint group was updated.

Parameter	Type	Description
domain_id	String	Specifies the tenant ID.
frozen_info	FrozenInfo object	Specifies the frozen details of cloud services or resources.

Table 4-101 Id

Parameter	Type	Description
id	String	Specifies the ID of the associated listener.

Table 4-102 FrozenInfo

Parameter	Type	Description
status	Integer	Specifies the status of a cloud service or resource. The value can be one of the following: <ul style="list-style-type: none"> • 0: unfrozen/normal (The cloud service will recover after being unfrozen.) • 1: frozen (Resources and data will be retained, but the cloud service cannot be used.) • 2: deleted/terminated (Both resources and data will be cleared.)
effect	Integer	Specifies the status of the resource after being frozen. The value can be one of the following: <ul style="list-style-type: none"> • 1 (default): The resource is frozen and can be released. • 2: The resource is frozen and cannot be released. • 3: The resource is frozen and cannot be renewed.

Parameter	Type	Description
scene	Array of strings	<p>Specifies the service scenario. The value can be one of the following:</p> <ul style="list-style-type: none"> ● ARREAR: The cloud service is in arrears, including expiration of yearly/monthly resources and fee deduction failure of pay-per-use resources. ● POLICE: The cloud service is frozen for public security. ● ILLEGAL: The cloud service is frozen due to violation of laws and regulations. ● VERIFY: The cloud service is frozen because the user fails to pass the real-name authentication. ● PARTNER: A partner freezes their customer's resources.

Example Requests

Changing traffic dial to 5 and modifying the name and description of an endpoint group

```
PUT https://{ga_endpoint}/v1/endpoint-groups/3a9f50bb-f041-4eac-a117-82472d8a0007
```

```
{
  "endpoint_group": {
    "name": "endpoint-group-name-new",
    "description": "endpoint-group description new",
    "traffic_dial_percentage": 5
  }
}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "endpoint_group": {
    "id": "3a9f50bb-f041-4eac-a117-82472d8a0007",
    "name": "endpoint-group-name-new",
    "description": "endpoint-group description new",
    "status": "ACTIVE",
    "traffic_dial_percentage": 5,
    "region_id": "ap-southeast-1",
    "listeners": [ {
      "id": "1b11747a-b139-492f-9692-2df0b1c87193"
    } ],
    "created_at": "2019-01-08T01:21:37.151Z",
    "updated_at": "2019-01-08T01:21:37.151Z",
    "domain_id": "99a3fff0d03c428eac3678da6a7d0f24",
    "frozen_info": {
      "status": 2,

```

```

    "effect" : 1,
    "scene" : [ "ARREAR", "POLICE" ]
  },
  "request_id" : "915a14a6-867b-4af7-83d1-70efceb146f9"
}

```

Status Codes

Status Code	Description
200	Operation succeeded.

Error Codes

See [Error Codes](#).

4.3.5 Deleting an Endpoint Group

Function

This API is used to delete an endpoint group.

Constraints

Before deleting the endpoint group, you must delete all the associated endpoints and health checks.

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v1/endpoint-groups/{endpoint_group_id}

Table 4-103 Path Parameters

Parameter	Mandatory	Type	Description
endpoint_group_id	Yes	String	Specifies the endpoint group ID.

Request Parameters

Table 4-104 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

None

Example Requests

Deleting an endpoint group

```
DELETE https://{ga_endpoint}/v1/endpoint-groups/3a9f50bb-f041-4eac-a117-82472d8a0007
```

Example Responses

None

Status Codes

Status Code	Description
204	Endpoint group deleted.

Error Codes

See [Error Codes](#).

4.4 Endpoint

4.4.1 Querying Endpoints in an Endpoint Group

Function

This API is used to query endpoints in an endpoint group.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/endpoint-groups/{endpoint_group_id}/endpoints

Table 4-105 Path Parameters

Parameter	Mandatory	Type	Description
endpoint_group_id	Yes	String	Specifies the endpoint group ID.

Table 4-106 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the number of resources on each page. If this parameter is not specified, the default value is 500 .
marker	No	String	Specifies the ID of the resource from which pagination query starts, that is, the ID of the last resource on the previous page. If the parameter is not specified, only resources on the first page are queried. This parameter must be used together with limit .
page_reverse	No	Boolean	Specifies the page direction. The value can be true or false , and the default value is false . The last page in the list requested with page_reverse set to false will not contain the "next" link, and the last page in the list requested with page_reverse set to true will not contain the "previous" link.
id	No	String	Specifies the resource ID.

Parameter	Mandatory	Type	Description
status	No	String	Specifies the resource status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.

Request Parameters

Table 4-107 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-108 Response body parameters

Parameter	Type	Description
endpoints	Array of EndpointDetail objects	Specifies the endpoints.
page_info	PageInfo object	Specifies the pagination query information.
request_id	String	Specifies the request ID.

Table 4-109 EndpointDetail

Parameter	Type	Description
id	String	Specifies the endpoint ID.
resource_id	String	Specifies the endpoint ID.
endpoint_group_id	String	Specifies the endpoint group ID.
resource_type	String	Specifies the endpoint type.
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none">● ACTIVE: The resource is running.● PENDING: The status is to be determined.● ERROR: Failed to create the resource.● DELETING: The resource is being deleted.
weight	Integer	Specifies the weight of the endpoint based on which the listener distributes traffic.
health_state	String	Specifies the health check result of the endpoint. The value can be one of the following: <ul style="list-style-type: none">● INITIAL: Initial● HEALTHY: Healthy● UNHEALTHY: Unhealthy● NO_MONITOR: Not monitored
created_at	String	Specifies when the endpoint was added.
updated_at	String	Specifies when the endpoint was updated.
domain_id	String	Specifies the tenant ID.
ip_address	String	Specifies the IP address of the endpoint.
frozen_info	FrozenInfo object	Specifies the frozen details of cloud services or resources.

Table 4-110 FrozenInfo

Parameter	Type	Description
status	Integer	<p>Specifies the status of a cloud service or resource. The value can be one of the following:</p> <ul style="list-style-type: none"> • 0: unfrozen/normal (The cloud service will recover after being unfrozen.) • 1: frozen (Resources and data will be retained, but the cloud service cannot be used.) • 2: deleted/terminated (Both resources and data will be cleared.)
effect	Integer	<p>Specifies the status of the resource after being frozen. The value can be one of the following:</p> <ul style="list-style-type: none"> • 1 (default): The resource is frozen and can be released. • 2: The resource is frozen and cannot be released. • 3: The resource is frozen and cannot be renewed.
scene	Array of strings	<p>Specifies the service scenario. The value can be one of the following:</p> <ul style="list-style-type: none"> • ARREAR: The cloud service is in arrears, including expiration of yearly/monthly resources and fee deduction failure of pay-per-use resources. • POLICE: The cloud service is frozen for public security. • ILLEGAL: The cloud service is frozen due to violation of laws and regulations. • VERIFY: The cloud service is frozen because the user fails to pass the real-name authentication. • PARTNER: A partner freezes their customer's resources.

Table 4-111 PageInfo

Parameter	Type	Description
next_marker	String	Specifies the marker of the next page. If this parameter is left empty, the resource is on the last page.
current_count	Integer	Specifies the number of resources on the current list.

Example Requests

Querying endpoints in an endpoint group

```
GET https://{ga_endpoint}/v1/endpoint-groups/3a9f50bb-f041-4eac-a117-82472d8a0007/endpoints
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "endpoints": [ {
    "id": "0aa23a52-1ac2-4a2d-8dfa-1e11cb26079d",
    "resource_id": "08155cd2-5897-49be-933f-eec757fd4010",
    "endpoint_group_id": "3a9f50bb-f041-4eac-a117-82472d8a0007",
    "resource_type": "EIP",
    "status": "ACTIVE",
    "weight": 10,
    "health_state": "HEALTHY",
    "created_at": "2019-01-08T01:21:37.151Z",
    "updated_at": "2019-01-08T01:21:37.151Z",
    "domain_id": "99a3fff0d03c428eac3678da6a7d0f24",
    "ip_address": "208.182.11.121",
    "frozen_info": {
      "status": 2,
      "effect": 1,
      "scene": [ "ARREAR", "POLICE" ]
    }
  } ],
  "page_info": {
    "next_marker": "0aa23a52-1ac2-4a2d-8dfa-1e11cb26079d",
    "current_count": 1
  },
  "request_id": "915a14a6-867b-4af7-83d1-70efceb146f9"
}
```

Status Codes

Status Code	Description
200	Operation succeeded.

Error Codes

See [Error Codes](#).

4.4.2 Adding an Endpoint

Function

This API is used to add an endpoint.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/endpoint-groups/{endpoint_group_id}/endpoints

Table 4-112 Path Parameters

Parameter	Mandatory	Type	Description
endpoint_group_id	Yes	String	Specifies the endpoint group ID.

Request Parameters

Table 4-113 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-114 Request body parameters

Parameter	Mandatory	Type	Description
endpoint	Yes	CreateEndpointOption object	Specifies the detailed information about adding an endpoint.

Table 4-115 CreateEndpointOption

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Specifies the endpoint ID, for example, EIP ID.
resource_type	Yes	String	Specifies the endpoint type.
weight	No	Integer	Specifies the weight of the endpoint based on which the listener distributes traffic.
ip_address	Yes	String	Specifies the IP address of the endpoint.

Response Parameters

Status code: 201

Table 4-116 Response body parameters

Parameter	Type	Description
endpoint	EndpointDetail object	Specifies the detail of the endpoint.
request_id	String	Specifies the request ID.

Table 4-117 EndpointDetail

Parameter	Type	Description
id	String	Specifies the endpoint ID.
resource_id	String	Specifies the endpoint ID.
endpoint_group_id	String	Specifies the endpoint group ID.
resource_type	String	Specifies the endpoint type.
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.

Parameter	Type	Description
weight	Integer	Specifies the weight of the endpoint based on which the listener distributes traffic.
health_state	String	Specifies the health check result of the endpoint. The value can be one of the following: <ul style="list-style-type: none"> ● INITIAL: Initial ● HEALTHY: Healthy ● UNHEALTHY: Unhealthy ● NO_MONITOR: Not monitored
created_at	String	Specifies when the endpoint was added.
updated_at	String	Specifies when the endpoint was updated.
domain_id	String	Specifies the tenant ID.
ip_address	String	Specifies the IP address of the endpoint.
frozen_info	FrozenInfo object	Specifies the frozen details of cloud services or resources.

Table 4-118 FrozenInfo

Parameter	Type	Description
status	Integer	Specifies the status of a cloud service or resource. The value can be one of the following: <ul style="list-style-type: none"> ● 0: unfrozen/normal (The cloud service will recover after being unfrozen.) ● 1: frozen (Resources and data will be retained, but the cloud service cannot be used.) ● 2: deleted/terminated (Both resources and data will be cleared.)

Parameter	Type	Description
effect	Integer	Specifies the status of the resource after being frozen. The value can be one of the following: <ul style="list-style-type: none"> • 1 (default): The resource is frozen and can be released. • 2: The resource is frozen and cannot be released. • 3: The resource is frozen and cannot be renewed.
scene	Array of strings	Specifies the service scenario. The value can be one of the following: <ul style="list-style-type: none"> • ARREAR: The cloud service is in arrears, including expiration of yearly/monthly resources and fee deduction failure of pay-per-use resources. • POLICE: The cloud service is frozen for public security. • ILLEGAL: The cloud service is frozen due to violation of laws and regulations. • VERIFY: The cloud service is frozen because the user fails to pass the real-name authentication. • PARTNER: A partner freezes their customer's resources.

Example Requests

Creating an endpoint whose type is EIP, weight is 10, and IP address is 208.182.11.121

```
POST https://{ga_endpoint}/v1/endpoint-groups/3a9f50bb-f041-4eac-a117-82472d8a0007/endpoints
{
  "endpoint" : {
    "resource_id" : "08155cd2-5897-49be-933f-eec757fd4010",
    "resource_type" : "EIP",
    "weight" : 10,
    "ip_address" : "208.182.11.121"
  }
}
```

Example Responses

Status code: 201

Endpoint added.

```
{
  "endpoint" : {
```

```

    "id" : "0aa23a52-1ac2-4a2d-8dfa-1e11cb26079d",
    "resource_id" : "08155cd2-5897-49be-933f-eec757fd4010",
    "endpoint_group_id" : "3a9f50bb-f041-4eac-a117-82472d8a0007",
    "resource_type" : "EIP",
    "status" : "ACTIVE",
    "weight" : 10,
    "health_state" : "HEALTHY",
    "created_at" : "2019-01-08T01:21:37.151Z",
    "updated_at" : "2019-01-08T01:21:37.151Z",
    "domain_id" : "99a3fff0d03c428eac3678da6a7d0f24",
    "ip_address" : "208.182.11.121",
    "frozen_info" : {
      "status" : 2,
      "effect" : 1,
      "scene" : [ "ARREAR", "POLICE" ]
    }
  },
  "request_id" : "915a14a6-867b-4af7-83d1-70efceb146f9"
}

```

Status Codes

Status Code	Description
201	Endpoint added.

Error Codes

See [Error Codes](#).

4.4.3 Querying Details of an Endpoint

Function

This API is used to query details of an endpoint.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/endpoint-groups/{endpoint_group_id}/endpoints/{endpoint_id}

Table 4-119 Path Parameters

Parameter	Mandatory	Type	Description
endpoint_group_id	Yes	String	Specifies the endpoint group ID.
endpoint_id	Yes	String	Specifies the endpoint ID.

Request Parameters

Table 4-120 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-121 Response body parameters

Parameter	Type	Description
endpoint	EndpointDetail object	Specifies the detail of the endpoint.
request_id	String	Specifies the request ID.

Table 4-122 EndpointDetail

Parameter	Type	Description
id	String	Specifies the endpoint ID.
resource_id	String	Specifies the endpoint ID.
endpoint_group_id	String	Specifies the endpoint group ID.
resource_type	String	Specifies the endpoint type.
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.

Parameter	Type	Description
weight	Integer	Specifies the weight of the endpoint based on which the listener distributes traffic.
health_state	String	Specifies the health check result of the endpoint. The value can be one of the following: <ul style="list-style-type: none"> ● INITIAL: Initial ● HEALTHY: Healthy ● UNHEALTHY: Unhealthy ● NO_MONITOR: Not monitored
created_at	String	Specifies when the endpoint was added.
updated_at	String	Specifies when the endpoint was updated.
domain_id	String	Specifies the tenant ID.
ip_address	String	Specifies the IP address of the endpoint.
frozen_info	FrozenInfo object	Specifies the frozen details of cloud services or resources.

Table 4-123 FrozenInfo

Parameter	Type	Description
status	Integer	Specifies the status of a cloud service or resource. The value can be one of the following: <ul style="list-style-type: none"> ● 0: unfrozen/normal (The cloud service will recover after being unfrozen.) ● 1: frozen (Resources and data will be retained, but the cloud service cannot be used.) ● 2: deleted/terminated (Both resources and data will be cleared.)

Parameter	Type	Description
effect	Integer	Specifies the status of the resource after being frozen. The value can be one of the following: <ul style="list-style-type: none">• 1 (default): The resource is frozen and can be released.• 2: The resource is frozen and cannot be released.• 3: The resource is frozen and cannot be renewed.
scene	Array of strings	Specifies the service scenario. The value can be one of the following: <ul style="list-style-type: none">• ARREAR: The cloud service is in arrears, including expiration of yearly/monthly resources and fee deduction failure of pay-per-use resources.• POLICE: The cloud service is frozen for public security.• ILLEGAL: The cloud service is frozen due to violation of laws and regulations.• VERIFY: The cloud service is frozen because the user fails to pass the real-name authentication.• PARTNER: A partner freezes their customer's resources.

Example Requests

Querying details of an endpoint

```
GET https://{ga_endpoint}/v1/endpoint-groups/3a9f50bb-f041-4eac-a117-82472d8a0007/endpoints/0aa23a52-1ac2-4a2d-8dfa-1e11cb26079d
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "endpoint" : {
    "id" : "0aa23a52-1ac2-4a2d-8dfa-1e11cb26079d",
    "resource_id" : "08155cd2-5897-49be-933f-eec757fd4010",
    "endpoint_group_id" : "3a9f50bb-f041-4eac-a117-82472d8a0007",
    "resource_type" : "EIP",
    "status" : "ACTIVE",
    "weight" : 10,
    "health_state" : "HEALTHY",
    "created_at" : "2019-01-08T01:21:37.151Z",
```

```
"updated_at" : "2019-01-08T01:21:37.151Z",
"domain_id" : "99a3fff0d03c428eac3678da6a7d0f24",
"ip_address" : "208.182.11.121",
"frozen_info" : {
  "status" : 2,
  "effect" : 1,
  "scene" : [ "ARREAR", "POLICE" ]
},
"request_id" : "915a14a6-867b-4af7-83d1-70efceb146f9"
}
```

Status Codes

Status Code	Description
200	Operation succeeded.

Error Codes

See [Error Codes](#).

4.4.4 Updating an Endpoint

Function

This API is used to update an endpoint.

Calling Method

For details, see [Calling APIs](#).

URI

PUT /v1/endpoint-groups/{endpoint_group_id}/endpoints/{endpoint_id}

Table 4-124 Path Parameters

Parameter	Mandatory	Type	Description
endpoint_group_id	Yes	String	Specifies the endpoint group ID.
endpoint_id	Yes	String	Specifies the endpoint ID.

Request Parameters

Table 4-125 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-126 Request body parameters

Parameter	Mandatory	Type	Description
endpoint	Yes	UpdateEndpointOption object	Specifies the detailed information about updating an endpoint.

Table 4-127 UpdateEndpointOption

Parameter	Mandatory	Type	Description
weight	No	Integer	Specifies the weight of the endpoint based on which the listener distributes traffic.

Response Parameters

Status code: 200

Table 4-128 Response body parameters

Parameter	Type	Description
endpoint	EndpointDetail object	Specifies the detail of the endpoint.
request_id	String	Specifies the request ID.

Table 4-129 EndpointDetail

Parameter	Type	Description
id	String	Specifies the endpoint ID.
resource_id	String	Specifies the endpoint ID.
endpoint_group_id	String	Specifies the endpoint group ID.
resource_type	String	Specifies the endpoint type.
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.
weight	Integer	Specifies the weight of the endpoint based on which the listener distributes traffic.
health_state	String	Specifies the health check result of the endpoint. The value can be one of the following: <ul style="list-style-type: none"> ● INITIAL: Initial ● HEALTHY: Healthy ● UNHEALTHY: Unhealthy ● NO_MONITOR: Not monitored
created_at	String	Specifies when the endpoint was added.
updated_at	String	Specifies when the endpoint was updated.
domain_id	String	Specifies the tenant ID.
ip_address	String	Specifies the IP address of the endpoint.
frozen_info	FrozenInfo object	Specifies the frozen details of cloud services or resources.

Table 4-130 FrozenInfo

Parameter	Type	Description
status	Integer	<p>Specifies the status of a cloud service or resource. The value can be one of the following:</p> <ul style="list-style-type: none"> • 0: unfrozen/normal (The cloud service will recover after being unfrozen.) • 1: frozen (Resources and data will be retained, but the cloud service cannot be used.) • 2: deleted/terminated (Both resources and data will be cleared.)
effect	Integer	<p>Specifies the status of the resource after being frozen. The value can be one of the following:</p> <ul style="list-style-type: none"> • 1 (default): The resource is frozen and can be released. • 2: The resource is frozen and cannot be released. • 3: The resource is frozen and cannot be renewed.
scene	Array of strings	<p>Specifies the service scenario. The value can be one of the following:</p> <ul style="list-style-type: none"> • ARREAR: The cloud service is in arrears, including expiration of yearly/monthly resources and fee deduction failure of pay-per-use resources. • POLICE: The cloud service is frozen for public security. • ILLEGAL: The cloud service is frozen due to violation of laws and regulations. • VERIFY: The cloud service is frozen because the user fails to pass the real-name authentication. • PARTNER: A partner freezes their customer's resources.

Example Requests

Changing the weight of an endpoint to 5

```
PUT https://{ga_endpoint}/v1/endpoint-groups/3a9f50bb-f041-4eac-a117-82472d8a0007/endpoints/0aa23a52-1ac2-4a2d-8dfa-1e11cb26079d
```

```
{
  "endpoint" : {
    "weight" : 5
  }
}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "endpoint" : {
    "id" : "0aa23a52-1ac2-4a2d-8dfa-1e11cb26079d",
    "resource_id" : "08155cd2-5897-49be-933f-eec757fd4010",
    "endpoint_group_id" : "3a9f50bb-f041-4eac-a117-82472d8a0007",
    "resource_type" : "EIP",
    "status" : "ACTIVE",
    "weight" : 5,
    "health_state" : "HEALTHY",
    "created_at" : "2019-01-08T01:21:37.151Z",
    "updated_at" : "2019-01-08T01:21:37.151Z",
    "domain_id" : "99a3fff0d03c428eac3678da6a7d0f24",
    "ip_address" : "208.182.11.121",
    "frozen_info" : {
      "status" : 2,
      "effect" : 1,
      "scene" : [ "ARREAR", "POLICE" ]
    }
  },
  "request_id" : "915a14a6-867b-4af7-83d1-70efceb146f9"
}
```

Status Codes

Status Code	Description
200	Operation succeeded.

Error Codes

See [Error Codes](#).

4.4.5 Deleting an Endpoint

Function

This API is used to delete an endpoint.

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v1/endpoint-groups/{endpoint_group_id}/endpoints/{endpoint_id}

Table 4-131 Path Parameters

Parameter	Mandatory	Type	Description
endpoint_group_id	Yes	String	Specifies the endpoint group ID.
endpoint_id	Yes	String	Specifies the endpoint ID.

Request Parameters

Table 4-132 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

None

Example Requests

Deleting an endpoint

```
DELETE https://{ga_endpoint}/v1/endpoint-groups/3a9f50bb-f041-4eac-a117-82472d8a0007/endpoints/0aa23a52-1ac2-4a2d-8dfa-1e11cb26079d
```

Example Responses

None

Status Codes

Status Code	Description
204	Endpoint deleted.

Error Codes

See [Error Codes](#).

4.5 Health Check

4.5.1 Querying Health Checks

Function

This API is used to querying health checks.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/health-checks

Table 4-133 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the number of resources on each page. If this parameter is not specified, the default value is 500 .
marker	No	String	Specifies the ID of the resource from which pagination query starts, that is, the ID of the last resource on the previous page. If the parameter is not specified, only resources on the first page are queried. This parameter must be used together with limit .
page_reverse	No	Boolean	Specifies the page direction. The value can be true or false , and the default value is false . The last page in the list requested with page_reverse set to false will not contain the "next" link, and the last page in the list requested with page_reverse set to true will not contain the "previous" link.

Parameter	Mandatory	Type	Description
id	No	String	Specifies the resource ID.
status	No	String	Specifies the resource status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.
endpoint_group_id	No	String	Specifies the endpoint group ID.

Request Parameters

Table 4-134 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-135 Response body parameters

Parameter	Type	Description
health_checks	Array of HealthCheckDetail objects	Specifies the health checks.
page_info	PageInfo object	Specifies the pagination query information.
request_id	String	Specifies the request ID.

Table 4-136 HealthCheckDetail

Parameter	Type	Description
id	String	Specifies the health check ID.
endpoint_group_id	String	Specifies the endpoint group ID.
protocol	String	Specifies the health check protocol.
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none">● ACTIVE: The resource is running.● PENDING: The status is to be determined.● ERROR: Failed to create the resource.● DELETING: The resource is being deleted.
port	Integer	Specifies the port used for the health check.
interval	Integer	Specifies the health check interval, in seconds.
timeout	Integer	Specifies the maximum time required for waiting for a response from the health check, in seconds. It is recommended that you set a value less than that of parameter interval .
max_retries	Integer	Specifies the maximum number of retries. Specifies the number of consecutive health checks when the health check result of an endpoint changes from HEALTHY to UNHEALTHY , or from UNHEALTHY to HEALTHY .
created_at	String	Specifies when the health check was configured.
updated_at	String	Specifies when the health check was updated.
domain_id	String	Specifies the tenant ID.
enabled	Boolean	Specifies whether to enable health check.
frozen_info	FrozenInfo object	Specifies the frozen details of cloud services or resources.

Table 4-137 FrozenInfo

Parameter	Type	Description
status	Integer	<p>Specifies the status of a cloud service or resource. The value can be one of the following:</p> <ul style="list-style-type: none"> • 0: unfrozen/normal (The cloud service will recover after being unfrozen.) • 1: frozen (Resources and data will be retained, but the cloud service cannot be used.) • 2: deleted/terminated (Both resources and data will be cleared.)
effect	Integer	<p>Specifies the status of the resource after being frozen. The value can be one of the following:</p> <ul style="list-style-type: none"> • 1 (default): The resource is frozen and can be released. • 2: The resource is frozen and cannot be released. • 3: The resource is frozen and cannot be renewed.
scene	Array of strings	<p>Specifies the service scenario. The value can be one of the following:</p> <ul style="list-style-type: none"> • ARREAR: The cloud service is in arrears, including expiration of yearly/monthly resources and fee deduction failure of pay-per-use resources. • POLICE: The cloud service is frozen for public security. • ILLEGAL: The cloud service is frozen due to violation of laws and regulations. • VERIFY: The cloud service is frozen because the user fails to pass the real-name authentication. • PARTNER: A partner freezes their customer's resources.

Table 4-138 PageInfo

Parameter	Type	Description
next_marker	String	Specifies the marker of the next page. If this parameter is left empty, the resource is on the last page.
current_count	Integer	Specifies the number of resources on the current list.

Example Requests

Querying health checks

```
GET https://{ga_endpoint}/v1/health-checks
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "health_checks": [ {
    "id": "c2b210b2-60c4-449d-91e2-9e9ea1dd7442",
    "endpoint_group_id": "3a9f50bb-f041-4eac-a117-82472d8a0007",
    "protocol": "TCP",
    "status": "ACTIVE",
    "port": 3333,
    "interval": 30,
    "timeout": 30,
    "max_retries": 1,
    "created_at": "2019-01-08T01:21:37.151Z",
    "updated_at": "2019-01-08T01:21:37.151Z",
    "domain_id": "99a3fff0d03c428eac3678da6a7d0f24",
    "enabled": true,
    "frozen_info": {
      "status": 2,
      "effect": 1,
      "scene": [ "ARREAR", "POLICE" ]
    }
  } ],
  "page_info": {
    "next_marker": "c2b210b2-60c4-449d-91e2-9e9ea1dd7442",
    "current_count": 1
  },
  "request_id": "915a14a6-867b-4af7-83d1-70efceb146f9"
}
```

Status Codes

Status Code	Description
200	Operation succeeded.

Error Codes

See [Error Codes](#).

4.5.2 Configuring a Health Check

Function

This API is used to configure a health check.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/health-checks

Request Parameters

Table 4-139 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-140 Request body parameters

Parameter	Mandatory	Type	Description
health_check	Yes	CreateHealthCheckOption	Specifies the detailed information about configuring a health check.

Table 4-141 CreateHealthCheckOption

Parameter	Mandatory	Type	Description
endpoint_group_id	Yes	String	Specifies the endpoint group ID.
protocol	Yes	String	Specifies the health check protocol.

Parameter	Mandatory	Type	Description
port	Yes	Integer	Specifies the port used for the health check.
interval	Yes	Integer	Specifies the health check interval, in seconds.
timeout	Yes	Integer	Specifies the timeout duration of the health check, in seconds. It is recommended that you set a value less than that of parameter interval .
max_retries	Yes	Integer	Specifies the maximum number of retries. Specifies the number of consecutive health checks when the health check result of an endpoint changes from HEALTHY to UNHEALTHY , or from UNHEALTHY to HEALTHY .
enabled	Yes	Boolean	Specifies whether to enable health check.

Response Parameters

Status code: 201

Table 4-142 Response body parameters

Parameter	Type	Description
health_check	HealthCheckDetail object	Specifies the details of a health check.
request_id	String	Specifies the request ID.

Table 4-143 HealthCheckDetail

Parameter	Type	Description
id	String	Specifies the health check ID.
endpoint_group_id	String	Specifies the endpoint group ID.
protocol	String	Specifies the health check protocol.

Parameter	Type	Description
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.
port	Integer	Specifies the port used for the health check.
interval	Integer	Specifies the health check interval, in seconds.
timeout	Integer	Specifies the maximum time required for waiting for a response from the health check, in seconds. It is recommended that you set a value less than that of parameter interval .
max_retries	Integer	Specifies the maximum number of retries. Specifies the number of consecutive health checks when the health check result of an endpoint changes from HEALTHY to UNHEALTHY , or from UNHEALTHY to HEALTHY .
created_at	String	Specifies when the health check was configured.
updated_at	String	Specifies when the health check was updated.
domain_id	String	Specifies the tenant ID.
enabled	Boolean	Specifies whether to enable health check.
frozen_info	FrozenInfo object	Specifies the frozen details of cloud services or resources.

Table 4-144 FrozenInfo

Parameter	Type	Description
status	Integer	Specifies the status of a cloud service or resource. The value can be one of the following: <ul style="list-style-type: none"> • 0: unfrozen/normal (The cloud service will recover after being unfrozen.) • 1: frozen (Resources and data will be retained, but the cloud service cannot be used.) • 2: deleted/terminated (Both resources and data will be cleared.)
effect	Integer	Specifies the status of the resource after being frozen. The value can be one of the following: <ul style="list-style-type: none"> • 1 (default): The resource is frozen and can be released. • 2: The resource is frozen and cannot be released. • 3: The resource is frozen and cannot be renewed.
scene	Array of strings	Specifies the service scenario. The value can be one of the following: <ul style="list-style-type: none"> • ARREAR: The cloud service is in arrears, including expiration of yearly/monthly resources and fee deduction failure of pay-per-use resources. • POLICE: The cloud service is frozen for public security. • ILLEGAL: The cloud service is frozen due to violation of laws and regulations. • VERIFY: The cloud service is frozen because the user fails to pass the real-name authentication. • PARTNER: A partner freezes their customer's resources.

Example Requests

Enabling health check whose protocol is TCP, port is 3333, interval and timeout durations are 30 seconds, and the maximum retries is 1

```
POST https://{ga_endpoint}/v1/health-checks
```

```
{
  "health_check": {
    "endpoint_group_id": "3a9f50bb-f041-4eac-a117-82472d8a0007",
    "protocol": "TCP",
    "port": 3333,
    "interval": 30,
    "timeout": 30,
    "max_retries": 1,
    "enabled": true
  }
}
```

Example Responses

Status code: 201

Health check configured.

```
{
  "health_check": {
    "id": "c2b210b2-60c4-449d-91e2-9e9ea1dd7442",
    "endpoint_group_id": "3a9f50bb-f041-4eac-a117-82472d8a0007",
    "protocol": "TCP",
    "status": "ACTIVE",
    "port": 3333,
    "interval": 30,
    "timeout": 30,
    "max_retries": 1,
    "created_at": "2019-01-08T01:21:37.151Z",
    "updated_at": "2019-01-08T01:21:37.151Z",
    "domain_id": "99a3fff0d03c428eac3678da6a7d0f24",
    "enabled": true,
    "frozen_info": {
      "status": 2,
      "effect": 1,
      "scene": [ "ARREAR", "POLICE" ]
    }
  },
  "request_id": "915a14a6-867b-4af7-83d1-70efceb146f9"
}
```

Status Codes

Status Code	Description
201	Health check configured.

Error Codes

See [Error Codes](#).

4.5.3 Querying Details of a Health Check

Function

This API is used to query details of a health check.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/health-checks/{health_check_id}

Table 4-145 Path Parameters

Parameter	Mandatory	Type	Description
health_check_id	Yes	String	Specifies the health check ID.

Request Parameters

Table 4-146 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-147 Response body parameters

Parameter	Type	Description
health_check	HealthCheckDetail object	Specifies the details of a health check.
request_id	String	Specifies the request ID.

Table 4-148 HealthCheckDetail

Parameter	Type	Description
id	String	Specifies the health check ID.

Parameter	Type	Description
endpoint_group_id	String	Specifies the endpoint group ID.
protocol	String	Specifies the health check protocol.
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.
port	Integer	Specifies the port used for the health check.
interval	Integer	Specifies the health check interval, in seconds.
timeout	Integer	Specifies the maximum time required for waiting for a response from the health check, in seconds. It is recommended that you set a value less than that of parameter interval .
max_retries	Integer	Specifies the maximum number of retries. Specifies the number of consecutive health checks when the health check result of an endpoint changes from HEALTHY to UNHEALTHY , or from UNHEALTHY to HEALTHY .
created_at	String	Specifies when the health check was configured.
updated_at	String	Specifies when the health check was updated.
domain_id	String	Specifies the tenant ID.
enabled	Boolean	Specifies whether to enable health check.
frozen_info	FrozenInfo object	Specifies the frozen details of cloud services or resources.

Table 4-149 FrozenInfo

Parameter	Type	Description
status	Integer	<p>Specifies the status of a cloud service or resource. The value can be one of the following:</p> <ul style="list-style-type: none"> • 0: unfrozen/normal (The cloud service will recover after being unfrozen.) • 1: frozen (Resources and data will be retained, but the cloud service cannot be used.) • 2: deleted/terminated (Both resources and data will be cleared.)
effect	Integer	<p>Specifies the status of the resource after being frozen. The value can be one of the following:</p> <ul style="list-style-type: none"> • 1 (default): The resource is frozen and can be released. • 2: The resource is frozen and cannot be released. • 3: The resource is frozen and cannot be renewed.
scene	Array of strings	<p>Specifies the service scenario. The value can be one of the following:</p> <ul style="list-style-type: none"> • ARREAR: The cloud service is in arrears, including expiration of yearly/monthly resources and fee deduction failure of pay-per-use resources. • POLICE: The cloud service is frozen for public security. • ILLEGAL: The cloud service is frozen due to violation of laws and regulations. • VERIFY: The cloud service is frozen because the user fails to pass the real-name authentication. • PARTNER: A partner freezes their customer's resources.

Example Requests

Querying details of a health check

GET https://{ga_endpoint}/v1/health-checks/c2b210b2-60c4-449d-91e2-9e9ea1dd7442

Example Responses

Status code: 200

Operation succeeded.

```
{
  "health_check": {
    "id": "c2b210b2-60c4-449d-91e2-9e9ea1dd7442",
    "endpoint_group_id": "3a9f50bb-f041-4eac-a117-82472d8a0007",
    "protocol": "TCP",
    "status": "ACTIVE",
    "port": 3333,
    "interval": 30,
    "timeout": 30,
    "max_retries": 1,
    "created_at": "2019-01-08T01:21:37.151Z",
    "updated_at": "2019-01-08T01:21:37.151Z",
    "domain_id": "99a3fff0d03c428eac3678da6a7d0f24",
    "enabled": true,
    "frozen_info": {
      "status": 2,
      "effect": 1,
      "scene": [ "ARREAR", "POLICE" ]
    }
  },
  "request_id": "915a14a6-867b-4af7-83d1-70efceb146f9"
}
```

Status Codes

Status Code	Description
200	Operation succeeded.

Error Codes

See [Error Codes](#).

4.5.4 Updating a Health Check

Function

This API is used to update a health check.

Calling Method

For details, see [Calling APIs](#).

URI

PUT /v1/health-checks/{health_check_id}

Table 4-150 Path Parameters

Parameter	Mandatory	Type	Description
health_check_id	Yes	String	Specifies the health check ID.

Request Parameters

Table 4-151 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-152 Request body parameters

Parameter	Mandatory	Type	Description
health_check	Yes	UpdateHealthCheckOption object	Specifies the detailed information about updating a health check.

Table 4-153 UpdateHealthCheckOption

Parameter	Mandatory	Type	Description
protocol	No	String	Specifies the health check protocol.
port	No	Integer	Specifies the port used for the health check.
interval	No	Integer	Specifies the health check interval, in seconds.
timeout	No	Integer	Specifies the timeout duration of the health check, in seconds. It is recommended that you set a value less than that of parameter interval .

Parameter	Mandatory	Type	Description
max_retries	No	Integer	Specifies the maximum number of retries. Specifies the number of consecutive health checks when the health check result of an endpoint changes from HEALTHY to UNHEALTHY , or from UNHEALTHY to HEALTHY .
enabled	No	Boolean	Specifies whether to enable health check.

Response Parameters

Status code: 200

Table 4-154 Response body parameters

Parameter	Type	Description
health_check	HealthCheckDetail object	Specifies the details of a health check.
request_id	String	Specifies the request ID.

Table 4-155 HealthCheckDetail

Parameter	Type	Description
id	String	Specifies the health check ID.
endpoint_group_id	String	Specifies the endpoint group ID.
protocol	String	Specifies the health check protocol.
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.
port	Integer	Specifies the port used for the health check.

Parameter	Type	Description
interval	Integer	Specifies the health check interval, in seconds.
timeout	Integer	Specifies the maximum time required for waiting for a response from the health check, in seconds. It is recommended that you set a value less than that of parameter interval .
max_retries	Integer	Specifies the maximum number of retries. Specifies the number of consecutive health checks when the health check result of an endpoint changes from HEALTHY to UNHEALTHY , or from UNHEALTHY to HEALTHY .
created_at	String	Specifies when the health check was configured.
updated_at	String	Specifies when the health check was updated.
domain_id	String	Specifies the tenant ID.
enabled	Boolean	Specifies whether to enable health check.
frozen_info	FrozenInfo object	Specifies the frozen details of cloud services or resources.

Table 4-156 FrozenInfo

Parameter	Type	Description
status	Integer	Specifies the status of a cloud service or resource. The value can be one of the following: <ul style="list-style-type: none"> ● 0: unfrozen/normal (The cloud service will recover after being unfrozen.) ● 1: frozen (Resources and data will be retained, but the cloud service cannot be used.) ● 2: deleted/terminated (Both resources and data will be cleared.)

Parameter	Type	Description
effect	Integer	Specifies the status of the resource after being frozen. The value can be one of the following: <ul style="list-style-type: none"> • 1 (default): The resource is frozen and can be released. • 2: The resource is frozen and cannot be released. • 3: The resource is frozen and cannot be renewed.
scene	Array of strings	Specifies the service scenario. The value can be one of the following: <ul style="list-style-type: none"> • ARREAR: The cloud service is in arrears, including expiration of yearly/monthly resources and fee deduction failure of pay-per-use resources. • POLICE: The cloud service is frozen for public security. • ILLEGAL: The cloud service is frozen due to violation of laws and regulations. • VERIFY: The cloud service is frozen because the user fails to pass the real-name authentication. • PARTNER: A partner freezes their customer's resources.

Example Requests

Changing the port to 3334, the interval and timeout durations to 20 seconds, the maximum retries to 2, and disabling health check

```
PUT https://{ga_endpoint}/v1/health-checks/c2b210b2-60c4-449d-91e2-9e9ea1dd7442
```

```
{
  "health_check": {
    "protocol": "TCP",
    "port": 3334,
    "interval": 20,
    "timeout": 20,
    "max_retries": 2,
    "enabled": false
  }
}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "health_check": {
    "id": "c2b210b2-60c4-449d-91e2-9e9ea1dd7442",
    "endpoint_group_id": "3a9f50bb-f041-4eac-a117-82472d8a0007",
    "protocol": "TCP",
    "status": "ACTIVE",
    "port": 3334,
    "interval": 20,
    "timeout": 20,
    "max_retries": 2,
    "created_at": "2019-01-08T01:21:37.151Z",
    "updated_at": "2019-01-08T01:21:37.151Z",
    "domain_id": "99a3fff0d03c428eac3678da6a7d0f24",
    "enabled": false,
    "frozen_info": {
      "status": 2,
      "effect": 1,
      "scene": [ "ARREAR", "POLICE" ]
    }
  },
  "request_id": "915a14a6-867b-4af7-83d1-70efceb146f9"
}
```

Status Codes

Status Code	Description
200	Operation succeeded.

Error Codes

See [Error Codes](#).

4.5.5 Deleting a Health Check

Function

This API is used to delete a health check.

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v1/health-checks/{health_check_id}

Table 4-157 Path Parameters

Parameter	Mandatory	Type	Description
health_check_id	Yes	String	Specifies the health check ID.

Request Parameters

Table 4-158 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

None

Example Requests

Deleting a health check

```
DELETE https://{ga_endpoint}/v1/health-checks/c2b210b2-60c4-449d-91e2-9e9ea1dd7442
```

Example Responses

None

Status Codes

Status Code	Description
204	Health check deleted.

Error Codes

See [Error Codes](#).

4.6 IP Address Group

4.6.1 Creating an IP Address Group

Function

This API is used to create an IP address group.

This API is an asynchronous API. After you request to create an IP address group, an IP address group ID will be returned. However, the IP address group cannot be

created immediately. You can call the API for querying the IP address group details to check whether the creation is complete. If the IP address group status is ACTIVE, the IP address group has been created.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/ip-groups

Request Parameters

Table 4-159 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-160 Request body parameters

Parameter	Mandatory	Type	Description
ip_group	Yes	CreateIpGroupOption object	Describes the IP address group to be created.

Table 4-161 CreateIpGroupOption

Parameter	Mandatory	Type	Description
name	Yes	String	Specifies the name of the IP address group. The name can contain 1 to 64 characters. Only letters, digits, and hyphens (-) are allowed.
description	No	String	Describes the IP address group. The value can contain 0 to 255 characters and cannot contain <>.

Parameter	Mandatory	Type	Description
ip_list	No	Array of CreateIpGroupIpOption objects	Specifies the CIDR blocks in the IP address group. A maximum of 20 CIDR blocks can be added at a time.

Table 4-162 CreateIpGroupIpOption

Parameter	Mandatory	Type	Description
cidr	Yes	String	Specifies the CIDR block in the IP address group.
description	No	String	Describes the CIDR block in the IP address group. The value can contain 0 to 255 characters and cannot contain <>.

Response Parameters

Status code: 201

Table 4-163 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID.
ip_group	IpGroupDetail object	Specifies the details of the IP address group.

Table 4-164 IpGroupDetail

Parameter	Type	Description
id	String	Specifies the ID of the IP address group.
name	String	Specifies the name of the IP address group.
description	String	Describes the IP address group.

Parameter	Type	Description
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.
ip_list	Array of IpInfo objects	Specifies the CIDR blocks in the IP address group.
associated_listeners	Array of ListenerAccessControlPolicy objects	Specifies the access control policy used by the listener.
created_at	String	Specifies the time when the resource was created.
updated_at	String	Specifies the time when the resource was updated.

Table 4-165 IpInfo

Parameter	Type	Description
cidr	String	Specifies the CIDR block in the IP address group.
description	String	Describes the CIDR block in the IP address group.
created_at	String	Specifies the time when the resource was created.

Table 4-166 ListenerAccessControlPolicy

Parameter	Type	Description
listener_id	String	Specifies the listener ID.
type	String	Specifies the access control policy type. The value can be one of the following: <ul style="list-style-type: none"> ● BLACK: blacklist ● WHITE: whitelist

Example Requests

Creating an IP address group whose CIDR block is 127.0.0.0/24

```
POST https://{ga_endpoint}/v1/ip-groups

{
  "ip_group": {
    "name": "ip-group-name",
    "description": "ip-group description",
    "ip_list": [ {
      "cidr": "127.0.0.0/24",
      "description": "cidr description"
    } ]
  }
}
```

Example Responses

Status code: 201

Created.

```
{
  "request_id": "ac1bf54f-6a23-4074-af77-800648d25bc8",
  "ip_group": {
    "id": "e8996cd6-28cf-4ff2-951e-fa8ac895a6cd",
    "name": "ip-group-name",
    "description": "ip-group description",
    "status": "ACTIVE",
    "ip_list": [ {
      "cidr": "127.0.0.0/24",
      "description": "cidr description",
      "created_at": "2019-01-08T01:21:37.151Z"
    } ],
    "created_at": "2019-01-08T01:21:37.151Z",
    "updated_at": "2019-01-08T01:21:37.151Z"
  }
}
```

Status Codes

Status Code	Description
201	Created.

Error Codes

See [Error Codes](#).

4.6.2 Querying IP Address Groups

Function

This API is used to query IP address groups.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/ip-groups

Table 4-167 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the number of resources on each page. If this parameter is not specified, the default value is 500 .
marker	No	String	Specifies the ID of the resource from which pagination query starts, that is, the ID of the last resource on the previous page. If the parameter is not specified, only resources on the first page are queried. This parameter must be used together with limit .
listener_id	No	String	Specifies the listener ID that is used to query the associated IP address group. If listener_id is specified, only the IP address group associated with the specified listener is returned.

Request Parameters

Table 4-168 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-169 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID.
ip_groups	Array of IpGroupDetail objects	Specifies the details of the IP address group.
page_info	PageInfo object	Specifies the pagination query information.

Table 4-170 IpGroupDetail

Parameter	Type	Description
id	String	Specifies the ID of the IP address group.
name	String	Specifies the name of the IP address group.
description	String	Describes the IP address group.
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.
ip_list	Array of IpInfo objects	Specifies the CIDR blocks in the IP address group.
associated_listeners	Array of ListenerAccessControlPolicy objects	Specifies the access control policy used by the listener.
created_at	String	Specifies the time when the resource was created.
updated_at	String	Specifies the time when the resource was updated.

Table 4-171 IpInfo

Parameter	Type	Description
cidr	String	Specifies the CIDR block in the IP address group.
description	String	Describes the CIDR block in the IP address group.
created_at	String	Specifies the time when the resource was created.

Table 4-172 ListenerAccessControlPolicy

Parameter	Type	Description
listener_id	String	Specifies the listener ID.
type	String	Specifies the access control policy type. The value can be one of the following: <ul style="list-style-type: none"> • BLACK: blacklist • WHITE: whitelist

Table 4-173 PageInfo

Parameter	Type	Description
next_marker	String	Specifies the marker of the next page. If this parameter is left empty, the resource is on the last page.
current_count	Integer	Specifies the number of resources on the current list.

Example Requests

Querying IP address groups

```
GET https://{ga_endpoint}/v1/ip-groups
```

Example Responses

Status code: 200

Operation successful.

```
{
  "request_id": "ac1bf54f-6a23-4074-af77-800648d25bc8",
  "ip_groups": [ {
    "id": "e8996cd6-28cf-4ff2-951e-fa8ac895a6cd",
    "name": "ip-group-name",
```

```

    "description" : "ip-group description",
    "status" : "ACTIVE",
    "ip_list" : [ {
      "cidr" : "127.0.0.0/24",
      "description" : "cidr description",
      "created_at" : "2019-01-08T01:21:37.151Z"
    } ],
    "associated_listeners" : [ {
      "listener_id" : "1b11747a-b139-492f-9692-2df0b1c87193",
      "type" : "BLACK"
    } ],
    "created_at" : "2019-01-08T01:21:37.151Z",
    "updated_at" : "2019-01-08T01:21:37.151Z"
  } ],
  "page_info" : {
    "next_marker" : "09e86f09-03fc-440e-8132-03f3e149e979",
    "current_count" : 10
  }
}

```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

4.6.3 Querying Details of an IP Address Group

Function

This API is used to query details of an IP address group.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/ip-groups/{ip_group_id}

Table 4-174 Path Parameters

Parameter	Mandatory	Type	Description
ip_group_id	Yes	String	Specifies the ID of the IP address group.

Request Parameters

Table 4-175 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-176 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID.
ip_group	IpGroupDetail object	Specifies the details of the IP address group.

Table 4-177 IpGroupDetail

Parameter	Type	Description
id	String	Specifies the ID of the IP address group.
name	String	Specifies the name of the IP address group.
description	String	Describes the IP address group.
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.

Parameter	Type	Description
ip_list	Array of IpInfo objects	Specifies the CIDR blocks in the IP address group.
associated_listeners	Array of ListenerAccessControlPolicy objects	Specifies the access control policy used by the listener.
created_at	String	Specifies the time when the resource was created.
updated_at	String	Specifies the time when the resource was updated.

Table 4-178 IpInfo

Parameter	Type	Description
cidr	String	Specifies the CIDR block in the IP address group.
description	String	Describes the CIDR block in the IP address group.
created_at	String	Specifies the time when the resource was created.

Table 4-179 ListenerAccessControlPolicy

Parameter	Type	Description
listener_id	String	Specifies the listener ID.
type	String	Specifies the access control policy type. The value can be one of the following: <ul style="list-style-type: none"> • BLACK: blacklist • WHITE: whitelist

Example Requests

Querying details of an IP address group

```
GET https://{ga_endpoint}/v1/ip-groups/e8996cd6-28cf-4ff2-951e-fa8ac895a6cd
```

Example Responses

Status code: 200

Operation successful.

```
{
  "request_id": "ac1bf54f-6a23-4074-af77-800648d25bc8",
  "ip_group": {
    "id": "e8996cd6-28cf-4ff2-951e-fa8ac895a6cd",
    "name": "ip-group-name",
    "description": "ip-group description",
    "status": "ACTIVE",
    "ip_list": [ {
      "cidr": "127.0.0.0/24",
      "description": "cidr description",
      "created_at": "2019-01-08T01:21:37.151Z"
    } ],
    "associated_listeners": [ {
      "listener_id": "1b11747a-b139-492f-9692-2df0b1c87193",
      "type": "BLACK"
    } ],
    "created_at": "2019-01-08T01:21:37.151Z",
    "updated_at": "2019-01-08T01:21:37.151Z"
  }
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

4.6.4 Updating an IP Address Group

Function

This API is used to update an IP address group.

Calling Method

For details, see [Calling APIs](#).

URI

PUT /v1/ip-groups/{ip_group_id}

Table 4-180 Path Parameters

Parameter	Mandatory	Type	Description
ip_group_id	Yes	String	Specifies the ID of the IP address group.

Request Parameters

Table 4-181 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-182 Request body parameters

Parameter	Mandatory	Type	Description
ip_group	Yes	UpdateIpGroupOption object	Describes the IP address group to be updated.

Table 4-183 UpdateIpGroupOption

Parameter	Mandatory	Type	Description
name	No	String	Specifies the name of the IP address group. The name can contain 1 to 64 characters. Only letters, digits, and hyphens (-) are allowed.
description	No	String	Describes the IP address group. The value can contain 0 to 255 characters and cannot contain <>.

Response Parameters

Status code: 200

Table 4-184 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID.
ip_group	IpGroupDetail object	Specifies the details of the IP address group.

Table 4-185 IpGroupDetail

Parameter	Type	Description
id	String	Specifies the ID of the IP address group.
name	String	Specifies the name of the IP address group.
description	String	Describes the IP address group.
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.
ip_list	Array of IpInfo objects	Specifies the CIDR blocks in the IP address group.
associated_listeners	Array of ListenerAccessControlPolicy objects	Specifies the access control policy used by the listener.
created_at	String	Specifies the time when the resource was created.
updated_at	String	Specifies the time when the resource was updated.

Table 4-186 IpInfo

Parameter	Type	Description
cidr	String	Specifies the CIDR block in the IP address group.
description	String	Describes the CIDR block in the IP address group.
created_at	String	Specifies the time when the resource was created.

Table 4-187 ListenerAccessControlPolicy

Parameter	Type	Description
listener_id	String	Specifies the listener ID.
type	String	Specifies the access control policy type. The value can be one of the following: <ul style="list-style-type: none"> BLACK: blacklist WHITE: whitelist

Example Requests

Modifying the name and description of an IP address group

```
PUT https://{ga_endpoint}/v1/ip-groups/e8996cd6-28cf-4ff2-951e-fa8ac895a6cd
{
  "ip_group": {
    "name": "ip-group-name",
    "description": "ip-group description"
  }
}
```

Example Responses

Status code: 200

Operation successful.

```
{
  "request_id": "ac1bf54f-6a23-4074-af77-800648d25bc8",
  "ip_group": {
    "id": "e8996cd6-28cf-4ff2-951e-fa8ac895a6cd",
    "name": "ip-group-name",
    "description": "ip-group description",
    "status": "ACTIVE",
    "ip_list": [ {
      "cidr": "127.0.0.0/24",
      "description": "cidr description",
      "created_at": "2019-01-08T01:21:37.151Z"
    } ],
    "associated_listeners": [ {
      "listener_id": "1b11747a-b139-492f-9692-2df0b1c87193",
      "type": "BLACK"
    } ],
    "created_at": "2019-01-08T01:21:37.151Z",
    "updated_at": "2019-01-08T01:21:37.151Z"
  }
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

4.6.5 Deleting an IP Address Group

Function

This API is used to delete an IP address group.

This API is an asynchronous API. The deletion is not complete even after a response is returned. You can call the API for querying the IP address group details to check whether the deletion is complete. If the IP address group status is not found, the IP address group has been deleted. If the IP address group is associated with a listener, disassociate the IP address group from the listener before deleting the IP address group.

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v1/ip-groups/{ip_group_id}

Table 4-188 Path Parameters

Parameter	Mandatory	Type	Description
ip_group_id	Yes	String	Specifies the ID of the IP address group.

Request Parameters

Table 4-189 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

None

Example Requests

Deleting an IP address group

```
DELETE https://{ga_endpoint}/v1/ip-groups/e8996cd6-28cf-4ff2-951e-fa8ac895a6cd
```

Example Responses

None

Status Codes

Status Code	Description
204	Deleted.

Error Codes

See [Error Codes](#).

4.6.6 Adding CIDR Blocks to an IP Address Group

Function

This API is used to add CIDR blocks to an IP address group.

This is an asynchronous API. CIDR blocks are not added even after a response is returned. You can call the API for querying the IP address group details to check whether CIDR blocks are added. If the IP address group status is **ACTIVE**, the CIDR blocks are added.

Calling Method

For details, see [Calling APIs](#).

URI

```
POST /v1/ip-groups/{ip_group_id}/add-ips
```

Table 4-190 Path Parameters

Parameter	Mandatory	Type	Description
ip_group_id	Yes	String	Specifies the ID of the IP address group.

Request Parameters

Table 4-191 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-192 Request body parameters

Parameter	Mandatory	Type	Description
ip_list	Yes	Array of CreateIpGroupIpOption objects	Specifies the CIDR blocks in the IP address group. A maximum of 20 CIDR blocks can be added at a time.

Table 4-193 CreateIpGroupIpOption

Parameter	Mandatory	Type	Description
cidr	Yes	String	Specifies the CIDR block in the IP address group.
description	No	String	Describes the CIDR block in the IP address group. The value can contain 0 to 255 characters and cannot contain <>.

Response Parameters

Status code: 200

Table 4-194 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID.

Example Requests

Adding the CIDR block 127.0.0.0/24 to an IP address group

```
POST https://{ga_endpoint}/v1/ip-groups/e8996cd6-28cf-4ff2-951e-fa8ac895a6cd/add-ips
{
  "ip_list": [ {
    "cidr": "127.0.0.0/24",
    "description": "cidr description"
  } ]
}
```

Example Responses

Status code: 200

Operation successful.

```
{
  "request_id": "ac1bf54f-6a23-4074-af77-800648d25bc8"
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

4.6.7 Removing CIDR Blocks from an IP Address Group

Function

This API is used to remove CIDR blocks from an IP address group.

This is an asynchronous API. The removal is not complete even after a response is returned. You can call the API for querying the IP address group details to check whether the removal is complete. If the IP address group status is **ACTIVE**, the CIDR blocks are removed.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/ip-groups/{ip_group_id}/remove-ips

Table 4-195 Path Parameters

Parameter	Mandatory	Type	Description
ip_group_id	Yes	String	Specifies the ID of the IP address group.

Request Parameters

Table 4-196 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-197 Request body parameters

Parameter	Mandatory	Type	Description
ip_list	Yes	Array of strings	Specifies the CIDR blocks in the IP address group. A maximum of 20 CIDR blocks can be deleted at a time.

Response Parameters

Status code: 200

Table 4-198 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID.

Example Requests

Removing CIDR blocks from an IP address group

```
POST https://{ga_endpoint}/v1/ip-groups/e8996cd6-28cf-4ff2-951e-fa8ac895a6cd/remove-ips
{
  "ip_list" : [ "127.0.0.0/24" ]
}
```

Example Responses

Status code: 200

Operation successful.

```
{  
  "request_id" : "ac1bf54f-6a23-4074-af77-800648d25bc8"  
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

4.6.8 Associating an IP Address Group with a Listener

Function

This API is used to associate an IP address group with a listener.

This API is an asynchronous API. The association is not complete even after a response is returned. You can call the API for querying the IP address group details to check whether the association is complete. If the IP address group status is ACTIVE, the IP address group has been associated with the listener.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/ip-groups/{ip_group_id}/associate-listener

Table 4-199 Path Parameters

Parameter	Mandatory	Type	Description
ip_group_id	Yes	String	Specifies the ID of the IP address group.

Request Parameters

Table 4-200 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-201 Request body parameters

Parameter	Mandatory	Type	Description
listener_id	Yes	String	Specifies the listener ID.
type	Yes	String	Specifies the access control policy type. The value can be one of the following: <ul style="list-style-type: none"> • BLACK: blacklist • WHITE: whitelist

Response Parameters

Status code: 200

Table 4-202 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID.

Example Requests

Binding an IP address group to a listener whose access policy type is blacklist

```
POST https://{ga_endpoint}/v1/ip-groups/e8996cd6-28cf-4ff2-951e-fa8ac895a6cd/associate-listener
{
  "listener_id" : "e8996cd6-28cf-4ff2-951e-fa8ac895a6cd",
  "type" : "BLACK"
}
```

Example Responses

Status code: 200

Operation successful.

```
{  
  "request_id" : "ac1bf54f-6a23-4074-af77-800648d25bc8"  
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

4.6.9 Disassociating an IP Address Group from a Listener

Function

This API is used to disassociate an IP address group from a listener.

This API is an asynchronous API. The disassociation is not complete even after a response is returned. You can call the API for querying the IP address group details to check whether the disassociation is complete. If the IP address group status is ACTIVE, the IP address group has been disassociated from the listener.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/ip-groups/{ip_group_id}/disassociate-listener

Table 4-203 Path Parameters

Parameter	Mandatory	Type	Description
ip_group_id	Yes	String	Specifies the ID of the IP address group.

Request Parameters

Table 4-204 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-205 Request body parameters

Parameter	Mandatory	Type	Description
listener_id	Yes	String	Specifies the listener ID.

Response Parameters

Status code: 200

Table 4-206 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID.

Example Requests

Disassociating an IP address group from a listener

```
POST https://{ga_endpoint}/v1/ip-groups/e8996cd6-28cf-4ff2-951e-fa8ac895a6cd/disassociate-listener
{
  "listener_id" : "e8996cd6-28cf-4ff2-951e-fa8ac895a6cd"
}
```

Example Responses

Status code: 200

Operation successful.

```
{
  "request_id" : "ac1bf54f-6a23-4074-af77-800648d25bc8"
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

4.7 Region

4.7.1 Querying Regions

Function

This API is used to query regions.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/regions

Request Parameters

Table 4-207 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-208 Response body parameters

Parameter	Type	Description
regions	Array of Region objects	Specifies the regions.
request_id	String	Specifies the request ID.

Table 4-209 Region

Parameter	Type	Description
region_id	String	Specifies the region ID.
area	String	Specifies the acceleration area. The value can be one of the following: <ul style="list-style-type: none"> OUTOFCM: Outside the Chinese mainland CM: Chinese mainland
supported_endpoint_types	Array of strings	Specifies the endpoint type supported by the region. The value can be EIP .

Example Requests

Querying regions

```
GET https://{ga_endpoint}/v1/regions
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "regions": [ {
    "region_id": "ap-southeast-1",
    "area": "OUTOFCM",
    "supported_endpoint_types": [ "EIP" ]
  } ],
  "request_id": "ac1bf54f-6a23-4074-af77-800648d25bc8"
}
```

Status Codes

Status Code	Description
200	Operation succeeded.

Error Codes

See [Error Codes](#).

4.8 Tag

4.8.1 Adding Tags to a Resource

Function

This API is used to add tags to a resource.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{resource_type}/{resource_id}/tags/create

Table 4-210 Path Parameters

Parameter	Mandatory	Type	Description
resource_type	Yes	Object	Specifies the resource type.
resource_id	Yes	String	Specifies the resource ID.

Request Parameters

Table 4-211 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-212 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of ResourceTag objects	Specifies the tags.

Table 4-213 ResourceTag

Parameter	Mandatory	Type	Description
key	Yes	String	Specifies the tag key. The key must meet the following requirements: <ul style="list-style-type: none"> The key can contain 1 to 128 characters. The key can contain UTF-8 letters, digits, spaces, and the following characters: <code>._:=+-@</code> Tags starting with <code>_sys_</code> are system tags and cannot be entered by tenants.
value	Yes	String	Specifies the tag value. The value must meet the following requirements: <ul style="list-style-type: none"> The value can contain 0 to 255 characters. The key can contain UTF-8 letters, digits, spaces, and the following characters: <code>./:=+-@</code> The value can be empty or null.

Response Parameters

Status code: 204

Table 4-214 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID.

Example Requests

Adding tags to a resource

```
POST https://{ga_endpoint}/v1/{resource_type}/{resource_id}/tags/create
{
  "tags": [ {
    "key": "tagKey",
    "value": "tagValue"
  } ]
}
```

Example Responses

Status code: 204

Operation succeeded.

```
{
  "request_id": "915a14a6-867b-4af7-83d1-70efceb146f9"
}
```

Status Codes

Status Code	Description
204	Operation succeeded.

Error Codes

See [Error Codes](#).

4.8.2 Deleting Tags from a Resource

Function

This API is used to delete tags from a resource.

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v1/{resource_type}/{resource_id}/tags/delete

Table 4-215 Path Parameters

Parameter	Mandatory	Type	Description
resource_type	Yes	Object	Specifies the resource type.
resource_id	Yes	String	Specifies the resource ID.

Request Parameters

Table 4-216 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-217 Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of DeletingResourceTag objects	Specifies the tags.

Table 4-218 DeletingResourceTag

Parameter	Mandatory	Type	Description
key	Yes	String	Specifies the tag key. The value must meet the following requirements: <ul style="list-style-type: none"> The key can contain 1 to 128 characters. The key can contain UTF-8 letters, digits, spaces, and the following characters: <code>._:=-+@</code> Tags starting with <code>_sys_</code> are system tags and cannot be entered by tenants.

Response Parameters

Status code: 204

Table 4-219 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID.

Example Requests

Deleting tags from a resource

```
DELETE https://{ga_endpoint}/v1/{resource_type}/{resource_id}/tags/delete

{
  "tags": [ {
    "key": "key1"
  } ]
}
```

Example Responses

Status code: 204

Operation succeeded.

```
{
  "request_id": "915a14a6-867b-4af7-83d1-70efceb146f9"
}
```

Status Codes

Status Code	Description
204	Operation succeeded.

Error Codes

See [Error Codes](#).

4.8.3 Querying Tags of a Specific Resource

Function

This API is used to query tags of a specific resource.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{resource_type}/{resource_id}/tags

Table 4-220 Path Parameters

Parameter	Mandatory	Type	Description
resource_type	Yes	Object	Specifies the resource type.
resource_id	Yes	String	Specifies the resource ID.

Request Parameters

Table 4-221 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-222 Response body parameters

Parameter	Type	Description
tags	Array of ResourceTag objects	Specifies the tags.
request_id	String	Specifies the request ID.

Table 4-223 ResourceTag

Parameter	Type	Description
key	String	Specifies the tag key. The key must meet the following requirements: <ul style="list-style-type: none"> The key can contain 1 to 128 characters. The key can contain UTF-8 letters, digits, spaces, and the following characters:_.:=+@ Tags starting with _sys_ are system tags and cannot be entered by tenants.
value	String	Specifies the tag value. The value must meet the following requirements: <ul style="list-style-type: none"> The value can contain 0 to 255 characters. The key can contain UTF-8 letters, digits, spaces, and the following characters:_.:=+@ The value can be empty or null.

Example Requests

Querying tags of a specific resource

```
GET https://{ga_endpoint}/v1/{resource_type}/{resource_id}/tags
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "tags": [ {
    "key": "tagKey",
    "value": "tagValue"
  } ],
  "request_id": "915a14a6-867b-4af7-83d1-70efceb146f9"
}
```

Status Codes

Status Code	Description
200	Operation succeeded.

Error Codes

See [Error Codes](#).

4.8.4 Querying Resources by Tag

Function

This API is used to query resources by tag.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{resource_type}/resource-instances/filter

Table 4-224 Path Parameters

Parameter	Mandatory	Type	Description
resource_type	Yes	Object	Specifies the resource type.

Table 4-225 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the number of results on each page.
offset	No	Integer	Specifies the number of bytes to skip before starting to read data.

Request Parameters

Table 4-226 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-227 Request body parameters

Parameter	Mandatory	Type	Description
tags	No	Array of Tag objects	Specifies the tag list.
matches	No	Array of Match objects	Specifies the matched results.

Table 4-228 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	Specifies tag key.
values	Yes	Array of strings	Specifies the values of the tag.

Table 4-229 Match

Parameter	Mandatory	Type	Description
key	Yes	String	Specifies the key of the matched result.
value	Yes	String	Specifies the value of the matched result.

Response Parameters

Status code: 200

Table 4-230 Response body parameters

Parameter	Type	Description
resources	Array of ResourceTags objects	Specifies the resource list.
total_count	Integer	Specifies the total number of resources.

Table 4-231 ResourceTags

Parameter	Type	Description
resource_id	String	Specifies the resource ID.
resource_name	String	Specifies resource name.
tags	Array of ResourceTag objects	Specifies the tag.

Table 4-232 ResourceTag

Parameter	Type	Description
key	String	Specifies the tag key. The key must meet the following requirements: <ul style="list-style-type: none"> The key can contain 1 to 128 characters. The key can contain UTF-8 letters, digits, spaces, and the following characters: _ := + - @ Tags starting with _sys_ are system tags and cannot be entered by tenants.
value	String	Specifies the tag value. The value must meet the following requirements: <ul style="list-style-type: none"> The value can contain 0 to 255 characters. The key can contain UTF-8 letters, digits, spaces, and the following characters: _ := + - @ The value can be empty or null.

Example Requests

Querying Resources by Tag

POST https://{ga_endpoint}/v1/{resource_type}/resource-instances/filter

```
{
  "tags" : [ {
    "key" : "tagKey",
    "values" : [ "tagValue" ]
  } ],
  "matches" : [ {
    "key" : "resourceName",
    "value" : "name"
  } ]
}
```

Example Responses

Status code: 200

Operation successful.

```
{
  "resources" : [ {
    "resource_id" : "c2b210b2-60c4-449d-91e2-9e9ea1dd7443",
    "resource_name" : "resourceName",
    "tags" : [ {
      "key" : "tagKey",
      "value" : "tagValue"
    } ]
  } ],
  "total_count" : 1
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

4.8.5 Querying the Number of Resources by Tag

Function

This API is used to query the number of resources by tag.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{resource_type}/resource-instances/count

Table 4-233 Path Parameters

Parameter	Mandatory	Type	Description
resource_type	Yes	Object	Specifies the resource type.

Request Parameters

Table 4-234 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-235 Request body parameters

Parameter	Mandatory	Type	Description
tags	No	Array of Tag objects	Specifies the tag list.
matches	No	Array of Match objects	Specifies the matched results.

Table 4-236 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	Specifies tag key.
values	Yes	Array of strings	Specifies the values of the tag.

Table 4-237 Match

Parameter	Mandatory	Type	Description
key	Yes	String	Specifies the key of the matched result.
value	Yes	String	Specifies the value of the matched result.

Response Parameters

Status code: 200

Table 4-238 Response body parameters

Parameter	Type	Description
total_count	Integer	Specifies the total number of resources.
request_id	String	Specifies the request ID.

Example Requests

Querying the Number of Resources by Tag

```
POST https://{ga_endpoint}/v1/{resource_type}/resource-instances/count
{
  "tags" : [ {
    "key" : "tagKey",
    "values" : [ "tagValue" ]
  } ],
  "matches" : [ {
    "key" : "resourceName",
    "value" : "name"
  } ]
}
```

Example Responses

Status code: 200

Operation successful.

```
{
  "total_count" : 10,
  "request_id" : "ac1bf54f-6a23-4074-af77-800648d25bc9"
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

4.8.6 Querying the Tag List

Function

This API is used to query the tag list.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{resource_type}/tags

Table 4-239 Path Parameters

Parameter	Mandatory	Type	Description
resource_type	Yes	Object	Specifies the resource type.

Table 4-240 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the number of results on each page.
offset	No	Integer	Specifies the number of bytes to skip before starting to read data.

Request Parameters

Table 4-241 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-242 Response body parameters

Parameter	Type	Description
tags	Array of Tag objects	Specifies the tag list.

Parameter	Type	Description
total_count	Integer	Specifies the total number of resources.
request_id	String	Specifies the request ID.

Table 4-243 Tag

Parameter	Type	Description
key	String	Specifies tag key.
values	Array of strings	Specifies the values of the tag.

Example Requests

Querying the Tag List

```
GET https://{ga_endpoint}/v1/{resource_type}/tags
```

Example Responses

Status code: 200

Operation successful.

```
{
  "tags": [ {
    "key": "tagKey",
    "values": [ "tagValue" ]
  } ],
  "total_count": 1,
  "request_id": "ac1bf54f-6a23-4074-af77-800648d25bc9"
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

4.9 Log

4.9.1 Creating a Log

Function

This API is used to create a log.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/logtanks

Request Parameters

Table 4-244 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-245 Request body parameters

Parameter	Mandatory	Type	Description
logtank	Yes	CreateLogtankOption object	Specifies the request parameters for creating a log.

Table 4-246 CreateLogtankOption

Parameter	Mandatory	Type	Description
resource_type	Yes	String	Specifies the type of the resource associated with the log.
resource_id	Yes	String	Specifies the ID of the resource for which LTS is enabled.
log_group_id	Yes	String	Specifies the log group ID.

Parameter	Mandatory	Type	Description
log_stream_id	Yes	String	Specifies the log stream ID.

Response Parameters

Status code: 201

Table 4-247 Response body parameters

Parameter	Type	Description
logtank	LogtankDetail object	Specifies the response parameters for a log.
request_id	String	Specifies the request ID.

Table 4-248 LogtankDetail

Parameter	Type	Description
id	String	Specifies the log ID.
domain_id	String	Specifies the tenant ID.
project_id	String	Specifies the project ID.
resource_type	String	Specifies the type of the resource associated with the log.
resource_id	String	Specifies the ID of the resource for which LTS is enabled.
log_group_id	String	Specifies the log group ID.
log_stream_id	String	Specifies the log stream ID.
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.
created_at	String	Specifies the time when the log was created.

Parameter	Type	Description
updated_at	String	Specifies the time when the log was updated.

Example Requests

Creating a log for a specified listener

```
POST https://{ga_endpoint}/v1/logtanks
{
  "logtank" : {
    "resource_type" : "LISTENER",
    "resource_id" : "78d425da-4d5f-422f-b13b-40aa3f49bc55",
    "log_group_id" : "0b43cca4-a11a-4444-8ac5-2feee53a48ab",
    "log_stream_id" : "43afe287-2a2d-4bf2-a67d-8a027b9ed80c"
  }
}
```

Example Responses

Status code: 201

Created.

```
{
  "logtank" : {
    "id" : "ac1bf54f-6a23-4074-af77-800648d25bc8",
    "domain_id" : "99a3fff0d03c428eac3678da6a7d0f24",
    "project_id" : "644056c6947343d498427218e271b545",
    "resource_type" : "LISTENER",
    "resource_id" : "78d425da-4d5f-422f-b13b-40aa3f49bc55",
    "log_group_id" : "0b43cca4-a11a-4444-8ac5-2feee53a48ab",
    "log_stream_id" : "43afe287-2a2d-4bf2-a67d-8a027b9ed80c",
    "status" : "ACTIVE",
    "created_at" : "2019-01-08T01:21:37Z",
    "updated_at" : "2019-01-08T01:21:37Z"
  },
  "request_id" : "ac1bf54f-6a23-4074-af77-800648d25bc8"
}
```

Status Codes

Status Code	Description
201	Created.

Error Codes

See [Error Codes](#).

4.9.2 Querying Logs

Function

This API is used to query logs.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/logtanks

Table 4-249 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the number of resources on each page. If this parameter is not specified, the default value is 500 .
marker	No	String	Specifies the ID of the resource from which pagination query starts, that is, the ID of the last resource on the previous page. If the parameter is not specified, only resources on the first page are queried. This parameter must be used together with limit .
id	No	String	Specifies the resource ID.
status	No	String	Specifies the resource status. The value can be one of the following: <ul style="list-style-type: none">● ACTIVE: The resource is running.● PENDING: The status is to be determined.● ERROR: Failed to create the resource.● DELETING: The resource is being deleted.
resource_ids	No	Array of strings	Specifies the resource IDs.

Parameter	Mandatory	Type	Description
resource_type	No	String	Specifies the type of the resource associated with the log.

Request Parameters

Table 4-250 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-251 Response body parameters

Parameter	Type	Description
logtanks	Array of LogtankDetail objects	Specifies the response parameters for a log.
page_info	PageInfo object	Specifies the pagination query information.
request_id	String	Specifies the request ID.

Table 4-252 LogtankDetail

Parameter	Type	Description
id	String	Specifies the log ID.
domain_id	String	Specifies the tenant ID.
project_id	String	Specifies the project ID.
resource_type	String	Specifies the type of the resource associated with the log.

Parameter	Type	Description
resource_id	String	Specifies the ID of the resource for which LTS is enabled.
log_group_id	String	Specifies the log group ID.
log_stream_id	String	Specifies the log stream ID.
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.
created_at	String	Specifies the time when the log was created.
updated_at	String	Specifies the time when the log was updated.

Table 4-253 PageInfo

Parameter	Type	Description
next_marker	String	Specifies the marker of the next page. If this parameter is left empty, the resource is on the last page.
current_count	Integer	Specifies the number of resources on the current list.

Example Requests

Querying logs

```
GET https://{ga_endpoint}/v1/logtanks
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "logtanks" : [ {
    "id" : "ac1bf54f-6a23-4074-af77-800648d25bc8",
    "domain_id" : "99a3fff0d03c428eac3678da6a7d0f24",
    "project_id" : "644056c6947343d498427218e271b545",
```

```

"resource_type" : "LISTENER",
"resource_id" : "78d425da-4d5f-422f-b13b-40aa3f49bc55",
"log_group_id" : "0b43cca4-a11a-4444-8ac5-2feee53a48ab",
"log_stream_id" : "43afe287-2a2d-4bf2-a67d-8a027b9ed80c",
"status" : "ACTIVE",
"created_at" : "2019-01-08T01:21:37Z",
"updated_at" : "2019-01-08T01:21:37Z"
}],
"page_info" : {
  "next_marker" : "09e86f09-03fc-440e-8132-03f3e149e979",
  "current_count" : 10
},
"request_id" : "string"
}

```

Status Codes

Status Code	Description
200	Operation succeeded.

Error Codes

See [Error Codes](#).

4.9.3 Querying the Details of a Log

Function

This API is used to query the details of a log.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/logtanks/{logtank_id}

Table 4-254 Path Parameters

Parameter	Mandatory	Type	Description
logtank_id	Yes	String	Specifies the log ID.

Request Parameters

Table 4-255 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-256 Response body parameters

Parameter	Type	Description
logtank	LogtankDetail object	Specifies the response parameters for a log.
request_id	String	Specifies the request ID.

Table 4-257 LogtankDetail

Parameter	Type	Description
id	String	Specifies the log ID.
domain_id	String	Specifies the tenant ID.
project_id	String	Specifies the project ID.
resource_type	String	Specifies the type of the resource associated with the log.
resource_id	String	Specifies the ID of the resource for which LTS is enabled.
log_group_id	String	Specifies the log group ID.
log_stream_id	String	Specifies the log stream ID.

Parameter	Type	Description
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.
created_at	String	Specifies the time when the log was created.
updated_at	String	Specifies the time when the log was updated.

Example Requests

Querying the details of a log

```
GET https://{ga_endpoint}/v1/logtanks/ac1bf54f-6a23-4074-af77-800648d25bc8
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "logtank" : {
    "id" : "ac1bf54f-6a23-4074-af77-800648d25bc8",
    "domain_id" : "99a3fff0d03c428eac3678da6a7d0f24",
    "project_id" : "644056c6947343d498427218e271b545",
    "resource_type" : "LISTENER",
    "resource_id" : "78d425da-4d5f-422f-b13b-40aa3f49bc55",
    "log_group_id" : "0b43cca4-a11a-4444-8ac5-2feee53a48ab",
    "log_stream_id" : "43afe287-2a2d-4bf2-a67d-8a027b9ed80c",
    "status" : "ACTIVE",
    "created_at" : "2019-01-08T01:21:37Z",
    "updated_at" : "2019-01-08T01:21:37Z"
  },
  "request_id" : "ac1bf54f-6a23-4074-af77-800648d25bc8"
}
```

Status Codes

Status Code	Description
200	Operation succeeded.

Error Codes

See [Error Codes](#).

4.9.4 Updating a Log

Function

This API is used to update a log.

Calling Method

For details, see [Calling APIs](#).

URI

PUT /v1/logtanks/{logtank_id}

Table 4-258 Path Parameters

Parameter	Mandatory	Type	Description
logtank_id	Yes	String	Specifies the log ID.

Request Parameters

Table 4-259 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-260 Request body parameters

Parameter	Mandatory	Type	Description
logtank	Yes	UpdateLogtankOption object	Specifies the request parameters for updating a log.

Table 4-261 UpdateLogtankOption

Parameter	Mandatory	Type	Description
log_group_id	Yes	String	Specifies the log group ID.
log_stream_id	Yes	String	Specifies the log stream ID.

Response Parameters

Status code: 200

Table 4-262 Response body parameters

Parameter	Type	Description
logtank	LogtankDetail object	Specifies the response parameters for a log.
request_id	String	Specifies the request ID.

Table 4-263 LogtankDetail

Parameter	Type	Description
id	String	Specifies the log ID.
domain_id	String	Specifies the tenant ID.
project_id	String	Specifies the project ID.
resource_type	String	Specifies the type of the resource associated with the log.
resource_id	String	Specifies the ID of the resource for which LTS is enabled.
log_group_id	String	Specifies the log group ID.
log_stream_id	String	Specifies the log stream ID.
status	String	Specifies the provisioning status. The value can be one of the following: <ul style="list-style-type: none"> ● ACTIVE: The resource is running. ● PENDING: The status is to be determined. ● ERROR: Failed to create the resource. ● DELETING: The resource is being deleted.

Parameter	Type	Description
created_at	String	Specifies the time when the log was created.
updated_at	String	Specifies the time when the log was updated.

Example Requests

Modifying the log group and log stream

```
PUT https://{ga_endpoint}/v1/logtanks/ac1bf54f-6a23-4074-af77-800648d25bc8
```

```
{
  "logtank" : {
    "log_group_id" : "0b43cca4-a11a-4444-8ac5-2feee53a48ab",
    "log_stream_id" : "43afe287-2a2d-4bf2-a67d-8a027b9ed80c"
  }
}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "logtank" : {
    "id" : "ac1bf54f-6a23-4074-af77-800648d25bc8",
    "domain_id" : "99a3fff0d03c428eac3678da6a7d0f24",
    "project_id" : "644056c6947343d498427218e271b545",
    "resource_type" : "LISTENER",
    "resource_id" : "78d425da-4d5f-422f-b13b-40aa3f49bc55",
    "log_group_id" : "0b43cca4-a11a-4444-8ac5-2feee53a48ab",
    "log_stream_id" : "43afe287-2a2d-4bf2-a67d-8a027b9ed80c",
    "status" : "ACTIVE",
    "created_at" : "2019-01-08T01:21:37Z",
    "updated_at" : "2019-01-08T01:21:37Z"
  },
  "request_id" : "ac1bf54f-6a23-4074-af77-800648d25bc8"
}
```

Status Codes

Status Code	Description
200	Operation succeeded.

Error Codes

See [Error Codes](#).

4.9.5 Deleting a Log

Function

This API is used to delete a log.

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v1/logtanks/{logtank_id}

Table 4-264 Path Parameters

Parameter	Mandatory	Type	Description
logtank_id	Yes	String	Specifies the log ID.

Request Parameters

Table 4-265 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. The token can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

None

Example Requests

Deleting a log

```
DELETE https://{ga_endpoint}/v1/logtanks/ac1bf54f-6a23-4074-af77-800648d25bc8
```

Example Responses

None

Status Codes

Status Code	Description
204	Deleted.

Error Codes

See [Error Codes](#).

5 Permissions Policies and Supported Actions

5.1 Introduction

You can use Identity and Access Management (IAM) to manage permissions on your Global Accelerator resources. If your HUAWEI ID does not need individual IAM users, you can skip over this section.

New IAM users do not have any permissions assigned by default. You need to first add them to one or more groups and attach policies or roles to these groups. The users then inherit permissions from the groups and can perform specified operations on cloud services based on the permissions they have been assigned.

You can grant users permissions by using **roles** and **policies**. Roles are provided by IAM to define service-based permissions that match users' job responsibilities. Policies define API-based permissions for operations on specific resources under certain conditions, allowing for more fine-grained, secure access control of cloud resources.

NOTE

Policy-based authorization is useful if you want to allow or deny the access to an API.

An account has all of the permissions required to call all APIs, but IAM users must have the required permissions specifically assigned. The permissions required for calling an API are determined by the actions supported by the API. Only users who have been granted permissions allowing the actions can call the API successfully. For example, if an IAM user wants to query accelerators using an API, the user must have been granted permissions that allow the **ga:accelerator:list** action.

Supported Actions

Global Accelerator provides system-defined policies that can be directly used in IAM. You can also create custom policies to supplement system-defined policies for more refined access control. Operations supported by policies are specific to APIs. The following are common concepts related to policies:

- Permissions: statements in a policy that allow or deny certain operations.
- APIs: REST APIs that can be called by a user who has been granted specific permissions.
- Actions: specific operations that are allowed or denied.
- IAM projects/Enterprise projects: the authorization scope of a custom policy. A custom policy can be applied to IAM projects or enterprise projects or both. Policies that contain actions for both IAM and enterprise projects can be used and applied for both IAM and Enterprise Management. Policies that contain actions only for IAM projects can be used and applied to IAM only. For details about the differences between IAM and enterprise projects, see [What Are the Differences Between IAM and Enterprise Management?](#)

 NOTE

The check mark (√) indicates that an action takes effect and cross symbol (x) indicates that an action does not take effect for the corresponding type of projects.

Global Accelerator supports the following actions in custom policies:

- [Global Accelerator](#)
- [Listener](#)
- [Endpoint Group](#)
- [Endpoint](#)
- [Health Check](#)
- [IP Address Group](#)
- [Tag](#)

5.2 Global Accelerator

Permissi on	API	Action	Dependencies	IAM Project	Enterprise Project
Creating a global accelerator	POST /v1/accelerators	ga:accelerator:create	-	√	×
Querying global accelerators	GET /v1/accelerators	ga:accelerator:list	-	√	×
Querying the details of a global accelerator	GET /v1/accelerators/{accelerator_id}	ga:accelerator:get	-	√	×

Permission	API	Action	Dependencies	IAM Project	Enterprise Project
Updating a global accelerator	PUT /v1/accelerators/{accelerator_id}	ga:accelerator:update	-	√	×
Deleting a global accelerator	DELETE /v1/accelerators/{accelerator_id}	ga:accelerator:delete	-	√	×

5.3 Listener

Permission	API	Action	Dependencies	IAM Project	Enterprise Project
Adding a listener	POST /v1/listeners	ga:listener:create	-	√	×
Querying listeners	GET /v1/listeners	ga:listener:list	-	√	×
Querying the details of a listener	GET /v1/listeners/{listener_id}	ga:listener:get	-	√	×
Updating a listener	PUT /v1/listeners/{listener_id}	ga:listener:update	-	√	×
Deleting a listener	DELETE /v1/listeners/{listener_id}	ga:listener:delete	-	√	×

5.4 Endpoint Group

Permission	API	Action	Dependencies	IAM Project	Enterprise Project
Adding an endpoint group	POST /v1/endpoint-groups	ga:endpointgroup:create	-	√	×

Permission	API	Action	Dependencies	IAM Project	Enterprise Project
Querying endpoint groups	GET /v1/endpoint-groups	ga:endpointgroup:list	-	√	×
Querying the details of an endpoint group	GET /v1/endpoint-groups/{endpoint_group_id}	ga:endpointgroup:get	-	√	×
Updating an endpoint group	PUT /v1/endpoint-groups/{endpoint_group_id}	ga:endpointgroup:update	-	√	×
Deleting an endpoint group	DELETE /v1/endpoint-groups/{endpoint_group_id}	ga:endpointgroup:delete	-	√	×

5.5 Endpoint

Permission	API	Action	Dependencies	IAM Project	Enterprise Project
Adding an endpoint	POST /v1/endpoint-groups/{endpoint_group_id}/endpoints	ga:endpoint:create	-	√	×
Querying endpoints	GET /v1/endpoint-groups/{endpoint_group_id}/endpoints	ga:endpoint:list	-	√	×
Querying the details of an endpoint	GET /v1/endpoint-groups/{endpoint_group_id}/endpoints/{endpoint_id}	ga:endpoint:get	-	√	×

Permission	API	Action	Dependencies	IAM Project	Enterprise Project
Updating an endpoint	PUT /v1/endpoint-groups/{endpoint_group_id}/endpoints/{endpoint_id}	ga:endpoint:update	-	√	×
Deleting an endpoint	DELETE /v1/endpoint-groups/{endpoint_group_id}/endpoints/{endpoint_id}	ga:endpoint:delete	-	√	×

5.6 Health Check

Permission	API	Action	Dependencies	IAM Project	Enterprise Project
Configuring a health check	POST /v1/health-checks	ga:healthcheck:create	-	√	×
Querying health checks	GET /v1/health-checks	ga:healthcheck:list	-	√	×
Querying the details of a health check	GET /v1/health-checks/{health_check_id}	ga:healthcheck:get	-	√	×
Updating a health check	PUT /v1/health-checks/{health_check_id}	ga:healthcheck:update	-	√	×
Deleting a health check	DELETE /v1/health-checks/{health_check_id}	ga:healthcheck:delete	-	√	×

5.7 IP Address Group

Permission	API	Action	Dependencies	IAM Project	Enterprise Project
Creating an IP address group	POST /v1/ip-groups	ga:ipgroup:create	-	√	×
Querying IP address groups	GET /v1/ip-groups	ga:ipgroup:list	-	√	×
Querying the details of an IP address group	GET /v1/ip-groups/{ip_group_id}	ga:ipgroup:get	-	√	×
Updating an IP address group	PUT /v1/ip-groups/{ip_group_id}	ga:ipgroup:update	-	√	×
Deleting an IP address group	DELETE /v1/ip-groups/{ip_group_id}	ga:ipgroup:delete	-	√	×
Adding CIDR blocks to an IP address group	POST /v1/ip-groups/{ip_group_id}/add-ips	ga:ipgroup:addlps	-	√	×
Deleting IP addresses from an IP address group	POST /v1/ip-groups/{ip_group_id}/remove-ips	ga:ipgroup:removelps	-	√	×

Permission	API	Action	Dependencies	IAM Project	Enterprise Project
Associating an IP address group with a listener	POST /v1/ip-groups/{ip_group_id}/associate-listener	ga:ipgroup:associateListener	-	√	×
Disassociating an IP address group from a listener	POST /v1/ip-groups/{ip_group_id}/disassociate-listener	ga:ipgroup:disassociateListener	-	√	×

5.8 Tag

Permission	API	Action	Dependencies	IAM Project	Enterprise Project
Adding a tag	POST /v1/{resource_type}/{resource_id}/tags/create	ga:tag:create	-	√	×
Deleting a tag	DELETE /v1/{resource_type}/{resource_id}/tags/delete	ga:tag:delete	-	√	×
Querying a tag	GET /v1/{resource_type}/{resource_id}/tags	ga:tag:get	-	√	×
Querying resources by tag	POST /v1/{resource_type}/resource-instances/filter	ga:tag:listResourcesByTag	-	√	×
Querying the number of resources by tag	POST /v1/{resource_type}/resource-instances/count	ga:tag:listResourcesByTag	-	√	×

Permissi on	API	Action	Dependencies	IAM Project	Enterprise Project
Querying the tag list	GET /v1/ {resource_type} /tags	ga:tag:list	-	√	×

6 Appendix

6.1 Status Code

- Normal

Table 6-1 Return codes for successful requests

Status Code	Returned Value	Description
200	OK	The results of POST, GET, and PUT operations are returned as expected.
201	Created	The result of the POST operation is returned as expected.
204	No Content	The result of the DELETE operation is returned as expected.

- Abnormal

Table 6-2 Return code for failed requests

Status Code	Returned Value	Description
400	Bad Request	The server failed to process the request.
401	Unauthorized	You must enter a username and password to access the requested page.
403	Forbidden	You are forbidden to access the requested page.
404	Not Found	The server could not find the requested page.

Status Code	Returned Value	Description
405	Method Not Allowed	You are not allowed to use the method specified in the request.
406	Not Acceptable	The response generated by the server could not be accepted by the client.
407	Proxy Authentication Required	You must use the proxy server for authentication so that the request can be processed.
408	Request Timeout	The request timed out.
409	Conflict	The request could not be processed due to a conflict.
500	Internal Server Error	Failed to complete the request because of an internal service error.
501	Not Implemented	Failed to complete the request because the server does not support the requested function.
502	Bad Gateway	Failed to complete the request because the server has received an invalid response.
503	Service Unavailable	Failed to complete the request because the service is unavailable.
504	Gateway Timeout	A gateway timeout error occurred.

6.2 Error Codes

If an error code starting with APIGW is returned after you call an API, rectify the fault by referring to the instructions provided in [API Gateway Error Codes](#).

Status Code	Error Codes	Error Message	Description	Solution
400	GA.9001	Invalid %s: %s	Invalid parameter in the request body.	Check the parameter as prompted and then resend the request.
400	GA.9004	Resource %s is in %s status no operation allowed	The resource status does not allow the operation.	Resend the request after the resource status changes.

Status Code	Error Codes	Error Message	Description	Solution
400	GA.9006	Resource frozen	This operation cannot be performed because the resource is frozen.	Check whether the account is frozen or contact technical support.
400	GA.9101	port_ranges is invalid or overlapped	Invalid or overlapped port range.	Enter a port range that is valid or does not overlap with that configured for other listeners.
400	GA.9103	Insufficient quota resource : %s	Insufficient resource quota.	Delete existing resources or change associated resources.
400	GA.9104	Resource %s is already exists	The resource already exists.	Change the resource ID and try again.
400	GA.9105	The acceleration capability is not enabled for the selected region: %s	Acceleration has not been enabled for the selected region.	Refresh the drop-down list of available regions.
400	GA.9106	Not support edge eip: %s	EIPs in edge regions are not supported.	Use EIPs in central regions instead.
400	GA.9107	Tag key is duplicated	The tag key must be unique.	Delete duplicate keys.
400	GA.9108	Tag value is duplicated	The tag value must be unique.	Delete duplicate values.
400	GA.9109	Tag key is empty	The tag key cannot be empty.	Specify the tag key.
400	GA.9110	Duplicated entry: %s	There are duplicate entries in the request.	Remove duplicate entries.

Status Code	Error Codes	Error Message	Description	Solution
404	GA.9002	Not found: %s	The resource does not exist.	Enter a valid parameter.
409	GA.9005	Found %s is associated by %s	Failed to delete the resource because it is associated with other resources.	Delete the associated resources and try again.
500	GA.9201	No available ip in common aip pool	No anycast IP address is available in the anycast IP address pool.	Contact technical support.
500	GA.9206	Resource [%s] unavailable: requiring reach max retry times	Resource unavailable. Requests reach the upper limit.	Contact technical support.
500	GA.9207	Check eip %s detail met error.	Failed to query the EIP details.	Try again later or contact technical support.
500	GA.9208	Check account frozen scenario met error	Failed to obtain the reason for freezing the account.	Contact technical support.
500	GA.9209	Call iam met error	Failed to access IAM.	Contact technical support.

6.3 Obtaining a Project ID

Scenarios

A project ID is required for some URLs. You need to obtain a project ID before you call an API. There are two methods available for you to obtain a project ID:

- [Obtain a Project ID by Calling an API](#)
- [Obtain a Project ID from the Console](#)

Obtain a Project ID by Calling an API

You can obtain a project ID by calling the API used to [query projects based on specified criteria](#).

The API used to obtain a project ID is **GET `https://{Endpoint}/v3/projects`**. `{Endpoint}` is the IAM endpoint that can be obtained from [Regions and Endpoints](#). For details about API authentication, see [Authentication](#).

The following is an example response. The value of **id** is the project ID.

```
{
  "projects": [
    {
      "domain_id": "65382450e8f64ac0870cd180d14e684b",
      "is_domain": false,
      "parent_id": "65382450e8f64ac0870cd180d14e684b",
      "name": "project_name",
      "description": "",
      "links": {
        "next": null,
        "previous": null,
        "self": "https://www.example.com/v3/projects/a4a5d4098fb4474fa22cd05f897d6b99"
      },
      "id": "a4a5d4098fb4474fa22cd05f897d6b99",
      "enabled": true
    }
  ],
  "links": {
    "next": null,
    "previous": null,
    "self": "https://www.example.com/v3/projects"
  }
}
```

Obtain a Project ID from the Console

To obtain a project ID from the console, perform the following operations:

1. Log in to the management console.
2. Click the username and select **My Credentials** from the drop-down list.
On the **API Credentials** page, view the project ID in the project list.

Figure 6-1 Viewing the project ID

