

API Gateway

API Reference

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1 Before You Start

1.1 Overview

API Gateway (APIG) is a high-performance, high-availability, and high-security API hosting service that helps enterprises build, manage, and deploy APIs at any scale.

This document describes how to use REST APIs to perform operations on APIG, such as creating, deleting, and modify your own APIs.

If you plan to access APIG through APIs, ensure that you are familiar with APIG concepts. For details, see the *API Gateway User Guide*.

1.2 API Calling

APIG supports Representational State Transfer (REST) APIs, allowing you to call APIs using HTTPS. For details about API calling, see [Calling APIs](#).

1.3 Endpoints

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

1.4 Constraints

- The number of APIG resources that you can create is determined by your quota. To increase your quota, contact technical support.
- For more constraints, see API description.

1.5 Concepts

- Account
An account is created upon successful registration with the cloud system. 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 and should not be used directly to perform routine management. For security purposes, create IAM users and grant them permissions for routine management.

- IAM user

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

An IAM user can view the account ID and user ID on the **My Credentials** page of the console. The account name, username, and password will be required for API authentication.

- Region

Regions are defined by their geographical location and network latency. Public services, such as Elastic Cloud Server (ECS), Elastic Volume Service (EVS), and Object Storage Service (OBS), are shared within the same region. There are universal regions and dedicated regions. A universal region serves all tenants, while a dedicated region serves specific tenants.

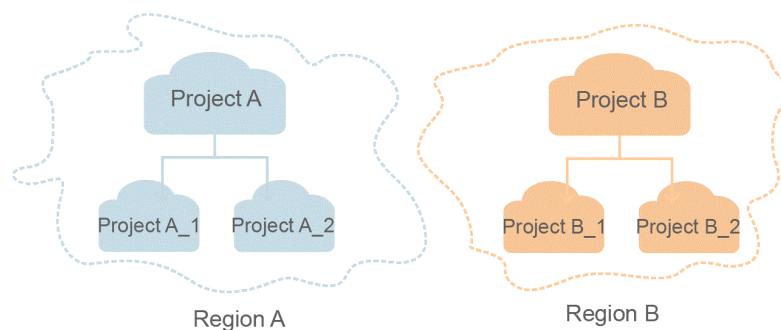
- AZ

AZs are physically isolated locations in a region, but are interconnected through an internal network for enhanced application availability.

- Project

A project corresponds to a region. Projects group and isolate resources (including compute, storage, and network resources) across physical regions. Users can be granted permissions in a default project to access all resources in the region associated with the project. For more refined access control, create subprojects under a project. Users can then be assigned permissions to access only specific resources in the subprojects.

Figure 1-1 Project isolating model



2 Calling APIs

2.1 Making an API Request

This section describes the structure of a REST API request, and uses the APIG API for creating an API group (dedicated gateways) as an example to demonstrate how to call an API.

Request URI

A request URI is in the following format:

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

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

Table 2-1 URI parameters

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 Endpoints .
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 create an API group in a dedicated gateway is <code>/v2/{project_id}/apigw/instances/{instance_id}/api-groups</code> . <code>{project_id}</code> indicates a project ID and <code>{instance_id}</code> indicates a gateway ID. The two IDs can be obtained from the gateway information on the APIG console.

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. Separate multiple query parameters with ampersands (&).

For example, to create an API group in a region, combine the parameters in the URI. *apig_endpoint* indicates the endpoint of APIG.

`https://{apig_endpoint}/v2/{project_id}/apigw/instances/{instance_id}/api-groups`

 **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:

- **GET**: requests the server to return specified resources.
- **PUT**: requests the server to update specified resources.
- **POST**: requests the server to add resources or perform special operations.
- **DELETE**: requests the server to delete specified resources, for example, an object.
- **HEAD**: same as GET except that the server must return only the response header.
- **PATCH**: requests the server to update partial content of a specified resource. If the resource does not exist, a new resource will be created.

For example, in the case of the API used to create an API group (dedicated gateways), the request method is POST. The request is as follows:

POST `https://{apig_endpoint}/v2/{project_id}/apigw/instances/{instance_id}/api-groups`

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:

- **Content-Type**: specifies the request body type or format. This field is mandatory and its default value is **application/json**. Other values of this field will be provided for specific APIs if any.
- **X-Auth-Token**: specifies a user token only for token-based API authentication. The user token is a response to the API used to obtain a user token.

 **NOTE**

In addition to supporting token-based authentication, APIs also support authentication using access key ID/secret access key (AK/SK). During AK/SK-based authentication, an SDK is used to sign the request, and the **Authorization** (signature information) and **X-Sdk-Date** (time when the request is sent) header fields are automatically added to the request.

For more information, see [AK/SK-based Authentication](#).

The API used to obtain a user token does not require authentication. Therefore, only the **Content-Type** field needs to be added to requests for calling the API. An example of such requests is as follows:

```
POST https://{iam_endpoint}/v3/auth/tokens
Content-Type: application/json
```

Request Body

The body of a request is often sent in a structured format as specified in the **Content-Type** header field. The request body transfers content except the request header.

The request body varies between APIs. Some APIs do not require the request body, such as the APIs requested using the GET and DELETE methods.

In the case of the API used to create an API group (dedicated gateways), the request parameters and parameter description can be obtained from the API request. The following provides an example request with a body included. Replace *name* (API group name) and *remark* (API group description) with the actual values.

```
POST https://{apig_endpoint}/v2/{project_id}/v2/{project_id}/apigw/instances/{instance_id}/api-groups
Content-Type: application/json
X-Auth-Token: xxxx
{
  "name": "APIGroup_test",
  "remark": "api group remark"
}
```

If all data required for the API request is available, you can send the request to call the API through [curl](#), [Postman](#), or coding.

2.2 Authentication

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

- Token-based authentication: Requests are authenticated using a token.
- AK/SK-based authentication: Requests are authenticated by encrypting the request body using an AK/SK pair. AK/SK-based authentication is recommended because it provides higher security than token-based authentication.

Token-based Authentication

NOTE

The validity period of a token is 24 hours. When using a token for authentication, cache it to prevent frequently calling the IAM API used to obtain a user token.

A token specifies temporary permissions in a computer system. During API authentication using a token, the token is added to requests to get permissions for calling the API.

Making an API Request describes the process of calling the API used to create an API group (dedicated gateways). 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://{apig_endpoint}/v1.0/apigw/api-groups
Content-Type: application/json
X-Auth-Token: ABCDEFJ....
```

AK/SK-based Authentication

An AK/SK is used to verify the identity of a request sender. In AK/SK-based authentication, a signature needs to be obtained and then added to requests.

NOTE

AK: access key ID, which is a unique identifier used in conjunction with a secret access key to sign requests cryptographically.

SK: secret access key used in conjunction with an AK to sign requests cryptographically. It identifies a request sender and prevents the request from being modified.

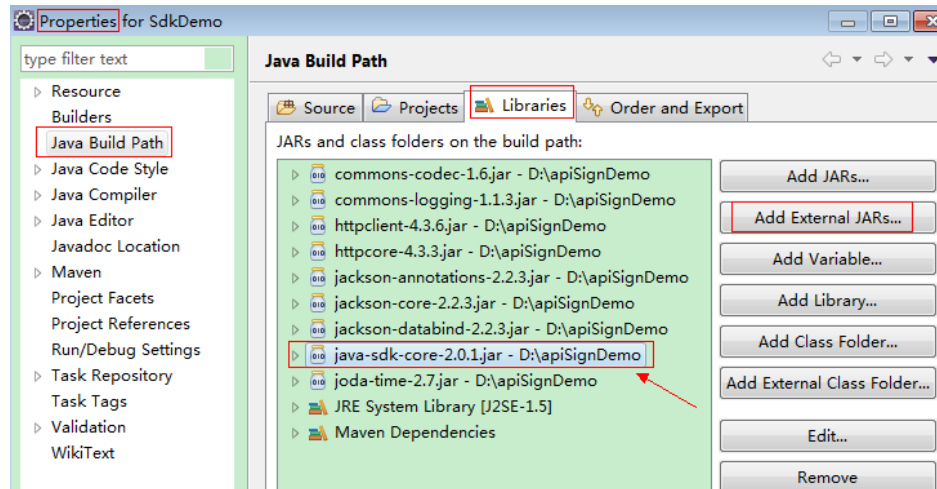
The following uses a demo project to show how to sign a request and use an HTTP client to send an HTTPS request.

Download the demo project at <https://github.com/api-gate-way/SdkDemo>.

If you do not need the demo, obtain the APIG signing SDK from technical support personnel.

AK: access key ID, which is a unique identifier used in conjunction with a secret access key to sign requests cryptographically.

Figure 2-1 Adding the APIG signing SDK



Step 1 Generate an AK/SK. (If an AK/SK file has already been obtained, skip this step and locate the downloaded AK/SK file. Generally, the file name will be **credentials.csv**.)

1. Register an account and log in to the management console.
2. Hover over the username, click the username, and choose **My Credentials** from the drop-down list.
3. Click the **Access Keys** tab.
4. Click **Create Access Key**.
5. Enter the login password.
6. Enter the verification code received by email or SMS message.

NOTE

For users created in IAM that have not bound any email address or mobile number, only the login password needs to be entered.

7. Click **OK** to download the access key.

NOTE

Keep the access key secure.

Step 2 Download and decompress the demo project.

Step 3 Import the demo project to Eclipse.

Figure 2-2 Selecting Existing Projects into Workspace

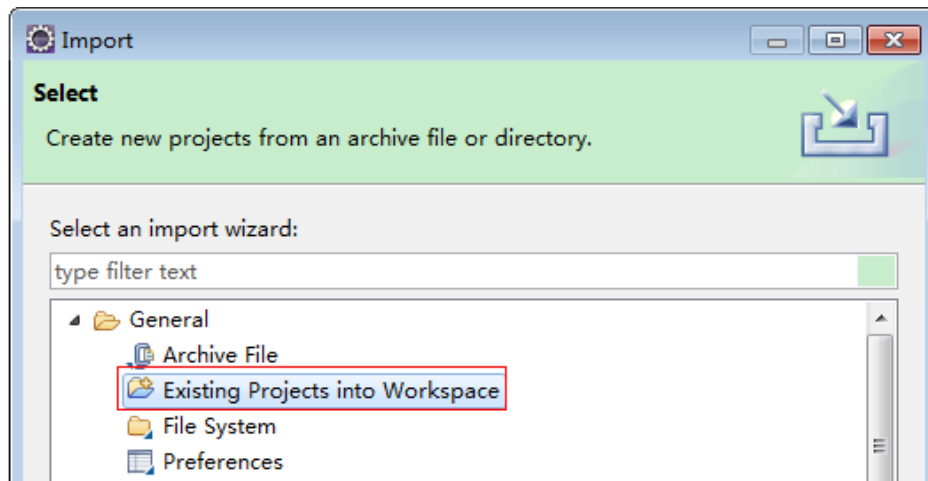


Figure 2-3 Selecting the demo project

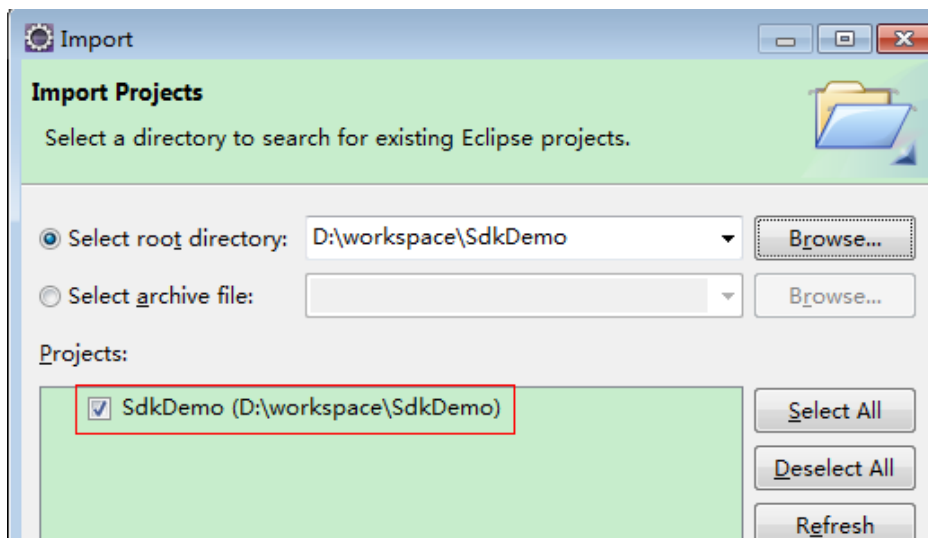
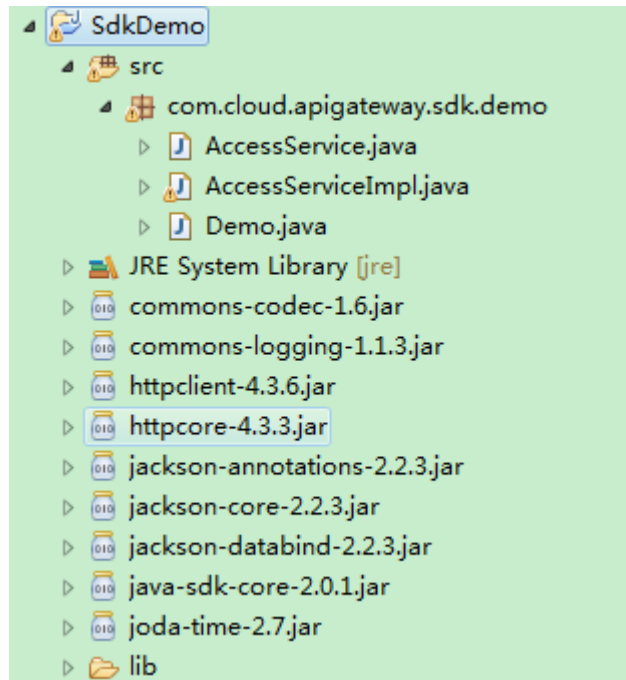


Figure 2-4 Structure of the demo project**Step 4** Sign the request.

The request signing method is integrated in the JAR files imported in [Step 3](#). The request needs to be signed before it is sent. The signature will then be added as part of the HTTP header to the request.

The demo code is classified into the following classes to demonstrate signing and sending the HTTP request:

- **AccessService**: An abstract class that merges the GET, POST, PUT, and DELETE methods into the access method.
- **Demo**: Execution entry used to simulate the sending of GET, POST, PUT, and DELETE requests.
- **AccessServiceImpl**: Implements the access method, which contains the code required for communication with APIG.

1. Edit the main() method in the **Demo.java** file, and replace the bold text with actual values.

As shown in the following code, if you use other methods such as POST, PUT, and DELETE, see the corresponding comment.

Specify **region**, **serviceName**, **ak/sk**, and **url** as the actual values. In this demo, the URLs for accessing VPC resources are used.

To obtain the project ID in the URLs, see [Obtaining a Project ID](#).

Obtain the endpoint from the enterprise administrator.

```
//TODO: Replace region with the name of the region in which the service to be accessed is located.  
private static final String region = "";  
  
//TODO: Replace vpc with the name of the service you want to access. For example, ecs, vpc, iam,  
and elb.  
private static final String serviceName = "";  
  
public static void main(String[] args) throws UnsupportedEncodingException
```

```
{
//TODO: Replace the AK and SK with those obtained on the My Credential page.
String ak = "ZIRRKMTWP*****1WKNKB";
String sk = "Us0mdMNHk*****YrCnW0ecfzl";

//TODO: To specify a project ID (multi-project scenarios), add the X-Project-Id header.
//TODO: To access a global service, such as IAM, DNS, CDN, and TMS, add the X-Domain-Id header to
specify an account ID.
//TODO: To add a header, find "Add special headers" in the AccessServiceImple.java file.

//TODO: Test the API
String url = "https://{Endpoint}/v1/{project_id}/vpcs";
get(ak, sk, url);

//TODO: When creating a VPC, replace {project_id} in postUrl with the actual value.
//String postUrl = "https://serviceEndpoint/v1/{project_id}/cloudservers";
//String postbody = "{\"vpc\": {\"name\": \"vpc\", \"cidr\": \"192.168.0.0/16\"}}";
//post(ak, sk, postUrl, postbody);

//TODO: When querying a VPC, replace {project_id} in url with the actual value.
//String url = "https://serviceEndpoint/v1/{project_id}/vpcs/{vpc_id}";
//get(ak, sk, url);

//TODO: When updating a VPC, replace {project_id} and {vpc_id} in putUrl with the actual values.
//String putUrl = "https://serviceEndpoint/v1/{project_id}/vpcs/{vpc_id}";
//String putbody = "{\"vpc\": {\"name\": \"vpc1\", \"cidr\": \"192.168.0.0/16\"}}";
//put(ak, sk, putUrl, putbody);

//TODO: When deleting a VPC, replace {project_id} and {vpc_id} in deleteUrl with the actual values.
//String deleteUrl = "https://serviceEndpoint/v1/{project_id}/vpcs/{vpc_id}";
//delete(ak, sk, deleteUrl);
}
```

2. Compile the code and call the API.

In the **Package Explorer** area on the left, right-click **Demo.java**, choose **Run AS > Java Application** from the shortcut menu to run the demo code.

You can view the API call logs on the console.

----End

2.3 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 [HTTP Status Codes](#).

For example, if status code **201** is returned for calling the API used to create an API group (dedicated gateways), the request is successful.

Response Header

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

(Optional) Response Body

The body of a response is often returned in structured format 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 API group (dedicated gateways).

```
{
  "id": "abcdef...",
  "name": "APIGroup_test",
  "remark": "api group remark",
  .....
}
```

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 token is missing.",
  "error_code": "APIG.1000"
}
```

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

3 Dedicated Gateway APIs (V2)

3.1 API Group Management

3.1.1 Creating an API Group

Function

This API is used to create an API group. An API group is an API management unit and the entry to a service. A subdomain name is returned as the access entry when an API group is created. APIs in an API group should be correlated with each other.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances/{instance_id}/api-groups

Table 3-1 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-2 Request header parameters

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

Table 3-3 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	API group name. The value can contain 3 to 255 characters, including letters, digits, and special characters (-_./():). It must start with a letter or digit. Minimum: 3 Maximum: 255
remark	No	String	API group description. Maximum: 1000
roma_app_id	No	String	ID of the integration application to which the API group belongs. This parameter is required when the group version is V2. Currently, this parameter is not supported.
version	No	String	Group version. <ul style="list-style-type: none"> • V1: global group • V2: application-level group The default value is V1. This parameter is not supported currently.

Response Parameters

Status code: 201

Table 3-4 Response body parameters

Parameter	Type	Description
id	String	ID.
name	String	API group name.
status	Integer	Status. <ul style="list-style-type: none"> 1: valid Enumeration values: <ul style="list-style-type: none"> 1
sl_domain	String	Subdomain name that APIG automatically allocates to the API group.
register_time	String	Creation time.
update_time	String	Last modification time.
on_sell_status	Integer	Indicates whether the API group has been listed on KooGallery. <ul style="list-style-type: none"> 1: listed 2: not listed 3: under review Not supported currently.
url_domains	Array of UrlDomain objects	Independent domain names bound to the API group.
sl_domains	Array of strings	Automatically allocated subdomain names.
remark	String	Description.
call_limits	Integer	Total number of times all APIs in the API group can be accessed. Consider the payload capacity of the backend service when setting this parameter. By default, there is no limit on the number of API calls. Currently, this parameter is not supported.
time_interval	Integer	Period of time for limiting the number of API calls. Currently, this parameter is not supported.
time_unit	String	Time unit for limiting the number of API calls. Currently, this parameter is not supported.
is_default	Integer	Indicates whether the API group is the default group.

Parameter	Type	Description
version	String	Group version. <ul style="list-style-type: none"> • V1: global group • V2: application-level group The default value is V1. This parameter is not supported currently.
roma_app_id	String	ID of the integration application to which the API group belongs. This parameter is required when the group version is V2. Currently, this parameter is not supported.
roma_app_name	String	Name of the integration application to which the API group belongs. Currently, this parameter is not supported.

Table 3-5 UrlDomain

Parameter	Type	Description
id	String	Domain ID.
domain	String	Domain name.
cname_status	Integer	CNAME resolution status of the domain name. <ul style="list-style-type: none"> • 1: not resolved • 2: resolving • 3: resolved • 4: resolution failed
ssl_id	String	SSL certificate ID.
ssl_name	String	SSL certificate name.
min_ssl_version	String	Minimum SSL version. TLS 1.1 and TLS 1.2 are supported. Default: TLSv1.1 Enumeration values: <ul style="list-style-type: none"> • TLSv1.1 • TLSv1.2
verified_client_certificate_enabled	Boolean	Whether to enable client certificate verification. This parameter is available only when a certificate is bound. It is enabled by default if trusted_root_ca exists, and disabled if trusted_root_ca does not exist. Default: false

Parameter	Type	Description
is_has_trusted_root_ca	Boolean	Whether a trusted root certificate (CA) exists. The value is true if trusted_root_ca exists in the bound certificate. Default: false

Status code: 400

Table 3-6 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-7 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-8 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-9 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Creating an API group

```
{
  "name" : "api_group_001",
  "remark" : "API group 1"
}
```

Example Responses

Status code: 201

Created

```
{
  "update_time" : "2020-07-31T06:55:55.383169299Z",
  "name" : "api_group_001",
  "on_sell_status" : 2,
  "remark" : "API group 1",
  "sl_domains" : [ "c77f5e81d9cb4424bf704ef2b0ac7600.apic.***.com",
  "c77f5e81d9cb4424bf704ef2b0ac7600.apic.***.cn" ],
  "sl_domain" : "c77f5e81d9cb4424bf704ef2b0ac7600.apic.***.com",
  "id" : "c77f5e81d9cb4424bf704ef2b0ac7600",
  "register_time" : "2020-07-31T06:55:55.383169068Z",
  "status" : 1,
  "is_default" : 2
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2011",
  "error_msg" : "Invalid parameter value,parameterName:name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
201	Created
400	Bad Request
401	Unauthorized
403	Forbidden
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.1.2 Modifying an API Group

Function

This API is used to modify the attributes of an API group. Only the name and remark attributes of an API group can be modified.

Calling Method

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

URI

PUT /v2/{project_id}/apigw/instances/{instance_id}/api-groups/{group_id}

Table 3-10 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
group_id	Yes	String	API group ID.

Request Parameters

Table 3-11 Request header parameters

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

Table 3-12 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	API group name. The value can contain 3 to 255 characters, including letters, digits, and special characters (-_./():). It must start with a letter or digit. Minimum: 3 Maximum: 255
remark	No	String	API group description. Maximum: 1000

Response Parameters

Status code: 200

Table 3-13 Response body parameters

Parameter	Type	Description
id	String	ID.
name	String	API group name.
status	Integer	Status. <ul style="list-style-type: none"> 1: valid Enumeration values: <ul style="list-style-type: none"> 1
sl_domain	String	Subdomain name that APIG automatically allocates to the API group.
register_time	String	Creation time.

Parameter	Type	Description
update_time	String	Last modification time.
on_sell_status	Integer	Indicates whether the API group has been listed on KooGallery. <ul style="list-style-type: none"> • 1: listed • 2: not listed • 3: under review Not supported currently.
url_domains	Array of UrlDomain objects	Independent domain names bound to the API group.
sl_domains	Array of strings	Automatically allocated subdomain names.
remark	String	Description.
call_limits	Integer	Total number of times all APIs in the API group can be accessed. Consider the payload capacity of the backend service when setting this parameter. By default, there is no limit on the number of API calls. Currently, this parameter is not supported.
time_interval	Integer	Period of time for limiting the number of API calls. Currently, this parameter is not supported.
time_unit	String	Time unit for limiting the number of API calls. Currently, this parameter is not supported.
is_default	Integer	Indicates whether the API group is the default group.
version	String	Group version. <ul style="list-style-type: none"> • V1: global group • V2: application-level group The default value is V1. This parameter is not supported currently.
roma_app_id	String	ID of the integration application to which the API group belongs. This parameter is required when the group version is V2. Currently, this parameter is not supported.
roma_app_name	String	Name of the integration application to which the API group belongs. Currently, this parameter is not supported.

Table 3-14 UrlDomain

Parameter	Type	Description
id	String	Domain ID.
domain	String	Domain name.
cname_status	Integer	CNAME resolution status of the domain name. <ul style="list-style-type: none"> • 1: not resolved • 2: resolving • 3: resolved • 4: resolution failed
ssl_id	String	SSL certificate ID.
ssl_name	String	SSL certificate name.
min_ssl_version	String	Minimum SSL version. TLS 1.1 and TLS 1.2 are supported. Default: TLSv1.1 Enumeration values: <ul style="list-style-type: none"> • TLSv1.1 • TLSv1.2
verified_client_certificate_enabled	Boolean	Whether to enable client certificate verification. This parameter is available only when a certificate is bound. It is enabled by default if trusted_root_ca exists, and disabled if trusted_root_ca does not exist. Default: false
is_has_trusted_root_ca	Boolean	Whether a trusted root certificate (CA) exists. The value is true if trusted_root_ca exists in the bound certificate. Default: false

Status code: 400

Table 3-15 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-16 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-17 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-18 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-19 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Modifying an API group

```
{
  "name" : "api_group_001",
  "remark" : "API group 1"
}
```

Example Responses

Status code: 200

OK

```
{
  "update_time" : "2020-07-31T06:55:55Z.866474185Z",
  "name" : "api_group_001",
  "on_sell_status" : 2,
  "remark" : "API group 1",
  "sl_domains" : [ "c77f5e81d9cb4424bf704ef2b0ac7600.apic.***.com",
  "c77f5e81d9cb4424bf704ef2b0ac7600.apic.***.cn" ],
  "sl_domain" : "c77f5e81d9cb4424bf704ef2b0ac7600.apic.***.com",
  "id" : "c77f5e81d9cb4424bf704ef2b0ac7600",
  "register_time" : "2020-07-31T06:55:55Z",
  "status" : 1,
  "is_default" : 2
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3001",
  "error_msg" : "API group c77f5e81d9cb4424bf704ef2b0ac7600 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.1.3 Deleting an API Group

Function

This API is used to delete an API group.

If the group to delete contains APIs, take the APIs offline and delete them.

All resources (independent domain names and SSL certificates) directly or indirectly associated with the group will be deleted. The operation will also unbind the external domain names from the subdomain name based on the CNAME resolution mode.

Calling Method

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

URI

DELETE /v2/{project_id}/apigw/instances/{instance_id}/api-groups/{group_id}

Table 3-20 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
group_id	Yes	String	API group ID.

Request Parameters

Table 3-21 Request header parameters

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

Response Parameters

Status code: 401

Table 3-22 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-23 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-24 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 412

Table 3-25 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500

Table 3-26 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3001",
  "error_msg" : "API group c77f5e81d9cb4424bf704ef2b0ac7600 does not exist"
}
```

Status code: 412

PreconditionFailed

```
{
  "error_code" : "APIG.3415",
  "error_msg" : "The API group cannot be deleted because it contains
APIs,id:47eaed4659db4e99ba2e1b642d5d1323"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
204	No Content
401	Unauthorized
403	Forbidden
404	Not Found
412	PreconditionFailed
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.1.4 Querying API Group Details

Function

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

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/api-groups/{group_id}

Table 3-27 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
group_id	Yes	String	API group ID.

Request Parameters

Table 3-28 Request header parameters

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

Response Parameters

Status code: 200

Table 3-29 Response body parameters

Parameter	Type	Description
id	String	ID.
name	String	API group name.
status	Integer	Status. <ul style="list-style-type: none"> 1: valid Enumeration values: <ul style="list-style-type: none"> 1
sl_domain	String	Subdomain name that APIG automatically allocates to the API group.

Parameter	Type	Description
register_time	String	Creation time.
update_time	String	Last modification time.
on_sell_status	Integer	Indicates whether the API group has been listed on KooGallery. <ul style="list-style-type: none"> • 1: listed • 2: not listed • 3: under review Not supported currently.
url_domains	Array of UrlDomain objects	Independent domain names bound to the API group.
sl_domains	Array of strings	Automatically allocated subdomain names.
remark	String	Description.
call_limits	Integer	Total number of times all APIs in the API group can be accessed. Consider the payload capacity of the backend service when setting this parameter. By default, there is no limit on the number of API calls. Currently, this parameter is not supported.
time_interval	Integer	Period of time for limiting the number of API calls. Currently, this parameter is not supported.
time_unit	String	Time unit for limiting the number of API calls. Currently, this parameter is not supported.
is_default	Integer	Indicates whether the API group is the default group.
version	String	Group version. <ul style="list-style-type: none"> • V1: global group • V2: application-level group The default value is V1. This parameter is not supported currently.
roma_app_id	String	ID of the integration application to which the API group belongs. This parameter is required when the group version is V2. Currently, this parameter is not supported.

Parameter	Type	Description
roma_app_name	String	Name of the integration application to which the API group belongs. Currently, this parameter is not supported.

Table 3-30 UrlDomain

Parameter	Type	Description
id	String	Domain ID.
domain	String	Domain name.
cname_status	Integer	CNAME resolution status of the domain name. <ul style="list-style-type: none"> • 1: not resolved • 2: resolving • 3: resolved • 4: resolution failed
ssl_id	String	SSL certificate ID.
ssl_name	String	SSL certificate name.
min_ssl_version	String	Minimum SSL version. TLS 1.1 and TLS 1.2 are supported. Default: TLSv1.1 Enumeration values: <ul style="list-style-type: none"> • TLSv1.1 • TLSv1.2
verified_client_certificate_enabled	Boolean	Whether to enable client certificate verification. This parameter is available only when a certificate is bound. It is enabled by default if trusted_root_ca exists, and disabled if trusted_root_ca does not exist. Default: false
is_has_trusted_root_ca	Boolean	Whether a trusted root certificate (CA) exists. The value is true if trusted_root_ca exists in the bound certificate. Default: false

Status code: 400

Table 3-31 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-32 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-33 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-34 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-35 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "update_time" : "2020-07-31T06:55:55Z",
  "name" : "api_group_001",
  "on_sell_status" : 2,
  "remark" : "API group 1",
  "sl_domains" : [ "c77f5e81d9cb4424bf704ef2b0ac7600.apic.****.com",
  "c77f5e81d9cb4424bf704ef2b0ac7600.apic.****.cn" ],
  "sl_domain" : "c77f5e81d9cb4424bf704ef2b0ac7600.apic.****.com",
  "id" : "c77f5e81d9cb4424bf704ef2b0ac7600",
  "register_time" : "2020-07-31T06:55:55Z",
  "status" : 1,
  "is_default" : 2
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3030",
  "error_msg" : "The instance does not exist;id:eddc4d25480b4cd6b512f270a1b8b341"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.1.5 Querying API Groups

Function

This API is used to query the API group list.

You can query all API groups in your account as a tenant, or query API groups of all tenants using an administrator account.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/api-groups

Table 3-36 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-37 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20
id	No	String	API group ID.
name	No	String	API group name.
precise_search	No	String	Parameter name for exact matching. Only API group names are supported.

Request Parameters

Table 3-38 Request header parameters

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

Response Parameters

Status code: 200

Table 3-39 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
groups	Array of ApiGroupInfo objects	API groups.

Table 3-40 ApiGroupInfo

Parameter	Type	Description
id	String	ID.
name	String	API group name.
status	Integer	Status. <ul style="list-style-type: none"> 1: valid Enumeration values: <ul style="list-style-type: none"> 1
sl_domain	String	Subdomain name that APIG automatically allocates to the API group.
register_time	String	Creation time.
update_time	String	Last modification time.
on_sell_status	Integer	Indicates whether the API group has been listed on KooGallery. <ul style="list-style-type: none"> 1: listed 2: not listed 3: under review Not supported currently.
url_domains	Array of UrlDomain objects	Independent domain names bound to the API group.
sl_domains	Array of strings	Automatically allocated subdomain names.
remark	String	Description.

Parameter	Type	Description
call_limits	Integer	Total number of times all APIs in the API group can be accessed. Consider the payload capacity of the backend service when setting this parameter. By default, there is no limit on the number of API calls. Currently, this parameter is not supported.
time_interval	Integer	Period of time for limiting the number of API calls. Currently, this parameter is not supported.
time_unit	String	Time unit for limiting the number of API calls. Currently, this parameter is not supported.
is_default	Integer	Indicates whether the API group is the default group.
version	String	Group version. <ul style="list-style-type: none"> • V1: global group • V2: application-level group The default value is V1. This parameter is not supported currently.
roma_app_id	String	ID of the integration application to which the API group belongs. This parameter is required when the group version is V2. Currently, this parameter is not supported.
roma_app_name	String	Name of the integration application to which the API group belongs. Currently, this parameter is not supported.

Table 3-41 UrlDomain

Parameter	Type	Description
id	String	Domain ID.
domain	String	Domain name.
cname_status	Integer	CNAME resolution status of the domain name. <ul style="list-style-type: none"> • 1: not resolved • 2: resolving • 3: resolved • 4: resolution failed

Parameter	Type	Description
ssl_id	String	SSL certificate ID.
ssl_name	String	SSL certificate name.
min_ssl_version	String	Minimum SSL version. TLS 1.1 and TLS 1.2 are supported. Default: TLSv1.1 Enumeration values: <ul style="list-style-type: none"> • TLSv1.1 • TLSv1.2
verified_client_certificate_enabled	Boolean	Whether to enable client certificate verification. This parameter is available only when a certificate is bound. It is enabled by default if trusted_root_ca exists, and disabled if trusted_root_ca does not exist. Default: false
is_has_trusted_root_ca	Boolean	Whether a trusted root certificate (CA) exists. The value is true if trusted_root_ca exists in the bound certificate. Default: false

Status code: 400

Table 3-42 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-43 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-44 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-45 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total" : 2,
  "size" : 2,
  "groups" : [ {
    "update_time" : "2020-07-31T06:55:55Z",
    "name" : "api_group_001",
    "on_sell_status" : 2,
    "remark" : "API group 1",
    "sl_domains" : [ "c77f5e81d9cb4424bf704ef2b0ac7600.apic.***.com",
c77f5e81d9cb4424bf704ef2b0ac7600.apic.***.cn" ],
    "sl_domain" : "c77f5e81d9cb4424bf704ef2b0ac7600.apic.***.com",
    "id" : "c77f5e81d9cb4424bf704ef2b0ac7600",
    "register_time" : "2020-07-31T06:55:55Z",
    "status" : 1,
    "is_default" : 2
  }, {
    "update_time" : "2020-06-24T15:29:42.421926Z",
    "name" : "api_group_002",
    "on_sell_status" : 2,
    "remark" : "API group 2",
    "sl_domain" : "02a8ab3cb2784de5a096852829671ae7.apic.***.com",
    "sl_domains" : [ "02a8ab3cb2784de5a096852829671ae7.apic.***.com",
"02a8ab3cb2784de5a096852829671ae7.apic.***.cn" ],
    "id" : "02a8ab3cb2784de5a096852829671ae7",
    "register_time" : "2020-06-24T15:29:42.421926Z",
    "status" : 1,
    "is_default" : 2
  } ]
}
```

Status code: 400

Bad Request

```
{  
  "error_code" : "APIG.2012",  
  "error_msg" : "Invalid parameter value,parameterName:name. Please refer to the support documentation"  
}
```

Status code: 401

Unauthorized

```
{  
  "error_code" : "APIG.1002",  
  "error_msg" : "Incorrect token or token resolution failed"  
}
```

Status code: 403

Forbidden

```
{  
  "error_code" : "APIG.1005",  
  "error_msg" : "No permissions to request this method"  
}
```

Status code: 500

Internal Server Error

```
{  
  "error_code" : "APIG.9999",  
  "error_msg" : "System error"  
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.2 Environment Management

3.2.1 Creating an Environment

Function

API providers can publish an API in different environments, such as the development, test, and production environments.

API information, such as the version, request address, and even request message, varies depending on the environment in which an API is published. For example, v1.0 of an API is published in the production environment, v1.1 in the test environment, and v1.2 in the development environment.

APIG provides environment management, enabling you to access APIG in different scenarios at minimal costs.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances/{instance_id}/envs

Table 3-46 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-47 Request header parameters

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

Table 3-48 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Environment name, which can contain letters, digits, and underscores (_) and must start with a letter. Minimum: 3 Maximum: 64
remark	No	String	Description. Maximum: 255

Response Parameters

Status code: 201

Table 3-49 Response body parameters

Parameter	Type	Description
create_time	String	Creation time.
name	String	Environment name.
remark	String	Description.
id	String	Environment ID.

Status code: 400

Table 3-50 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-51 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Status code: 403

Table 3-52 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-53 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Creating an environment

```
{
  "name" : "DEV",
  "remark" : "Development environment"
}
```

Example Responses

Status code: 201

Created

```
{
  "create_time" : "2020-07-31T06:41:43.511347628Z",
  "name" : "DEV",
  "remark" : "Development environment",
  "id" : "7a1ad0c350844ee69479b47df9a881cb"
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:name. Please refer to the support documentation"
}
```


Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
201	Created
400	Bad Request
401	Unauthorized
403	Forbidden
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.2.2 Modifying an Environment

Function

This API is used to modify the information about an environment. Only the name and remark attributes of an environment can be modified.

Calling Method

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

URI

PUT /v2/{project_id}/apigw/instances/{instance_id}/envs/{env_id}

Table 3-54 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
env_id	Yes	String	Environment ID.

Request Parameters

Table 3-55 Request header parameters

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

Table 3-56 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Environment name, which can contain letters, digits, and underscores (_) and must start with a letter. Minimum: 3 Maximum: 64
remark	No	String	Description. Maximum: 255

Response Parameters

Status code: 200

Table 3-57 Response body parameters

Parameter	Type	Description
create_time	String	Creation time.
name	String	Environment name.
remark	String	Description.
id	String	Environment ID.

Status code: 400

Table 3-58 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-59 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-60 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-61 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-62 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Modifying an environment

```
{
  "name" : "DEV",
  "remark" : "Development environment"
}
```

Example Responses

Status code: 200

OK

```
{
  "create_time" : "2020-07-31T06:41:43Z",
  "name" : "DEV",
  "remark" : "Development environment",
  "id" : "7a1ad0c350844ee69479b47df9a881cb"
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3003",
  "error_msg" : "Environment 7a1ad0c350844ee69479b47df9a881cb does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.2.3 Deleting an Environment

Function

This API is used to delete an environment.

This operation will cause the APIs published in the environment to become inaccessible to relevant apps and users. Ensure that you have notified users of the deletion, or confirm that the APIs can be removed from the deleted environment.

You cannot delete environments where APIs have been published.

Calling Method

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

URI

DELETE /v2/{project_id}/apigw/instances/{instance_id}/envs/{env_id}

Table 3-63 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
env_id	Yes	String	Environment ID.

Request Parameters

Table 3-64 Request header parameters

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

Response Parameters

Status code: 401

Table 3-65 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-66 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-67 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-68 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code": "APIG.3003",
  "error_msg": "Environment 7a1ad0c350844ee69479b47df9a881cb does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code": "APIG.9999",
  "error_msg": "System error"
}
```

Status Codes

Status Code	Description
204	No Content
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.2.4 Querying Environments

Function

This API is used to query environments.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/envs

Table 3-69 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-70 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20
name	No	String	Environment name.

Request Parameters

Table 3-71 Request header parameters

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

Response Parameters

Status code: 200

Table 3-72 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
envs	Array of EnvInfo objects	Environment list.

Table 3-73 EnvInfo

Parameter	Type	Description
create_time	String	Creation time.
name	String	Environment name.
remark	String	Description.
id	String	Environment ID.

Status code: 400

Table 3-74 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-75 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-76 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-77 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total" : 2,
  "size" : 2,
  "envs" : [ {
    "create_time" : "2019-02-12T19:42:19.914989Z",
    "name" : "RELEASE",
    "remark" : "xxx",
    "id" : "DEFAULT_ENVIRONMENT_RELEASE_ID"
  }, {
    "create_time" : "2020-07-31T06:41:43Z",
    "name" : "DEV",
    "remark" : "Development environment",
    "id" : "7a1ad0c350844ee69479b47df9a881cb"
  } ]
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.3 Environment Variable Management

3.3.1 Creating a Variable

Function

Publishing an API in different environments may involve various variables, such as API service deployment address and request version.

You can define environment variables when creating an API. When the API is called, the environment variables will be replaced with the variable values to distinguish environments.

Environment variables are defined for an API group and apply to all APIs in the group.

 **NOTE**

1. Environment variable names must be unique for an API group in the same environment.
2. Environment variable names are case-sensitive. For example, ABC and abc are two different variables.
3. APIs that use environment variables cannot be debugged.
4. You must enclose an environment variable in number signs (#) so that it can be replaced with the actual value of the environment in which the API is published. For example, if the URL of an API is `https://#address#:8080` and the value of variable `address` is `192.168.1.5` in the `RELEASE` environment, the real URL of the API is `https://192.168.1.5:8080` after publishing.

Calling Method

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

URI

POST `/v2/{project_id}/apigw/instances/{instance_id}/env-variables`

Table 3-78 Path Parameters

Parameter	Mandatory	Type	Description
<code>project_id</code>	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
<code>instance_id</code>	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-79 Request header parameters

Parameter	Mandatory	Type	Description
<code>X-Auth-Token</code>	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of <code>X-Subject-Token</code> in the response header is a token.

Table 3-80 Request body parameters

Parameter	Mandatory	Type	Description
variable_value	Yes	String	The variable value can contain 1 to 255 characters. Only letters, digits, and special characters (_-/:) are allowed.
env_id	Yes	String	Environment ID. Minimum: 1 Maximum: 65
group_id	Yes	String	API group ID. Minimum: 1 Maximum: 65
variable_name	Yes	String	Variable name, which can contain 3 to 32 characters, starting with a letter. Only letters, digits, hyphens (-), and underscores (_) are allowed. The variable name is equivalent to "#Name#" in API definitions. Characters between the number signs are case-sensitive. The variable name will be replaced with the variable value after API publication.

Response Parameters

Status code: 201

Table 3-81 Response body parameters

Parameter	Type	Description
variable_value	String	The variable value can contain 1 to 255 characters. Only letters, digits, and special characters (_-/:) are allowed.
env_id	String	Environment ID. Minimum: 1 Maximum: 65
group_id	String	API group ID. Minimum: 1 Maximum: 65

Parameter	Type	Description
variable_name	String	Variable name, which can contain 3 to 32 characters, starting with a letter. Only letters, digits, hyphens (-), and underscores (_) are allowed. The variable name is equivalent to "#Name#" in API definitions. Characters between the number signs are case-sensitive. The variable name will be replaced with the variable value after API publication.
id	String	Environment variable ID.

Status code: 400

Table 3-82 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-83 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-84 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-85 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-86 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Creating an environment variable

```
{
  "variable_name": "address",
  "variable_value": "192.168.1.5",
  "env_id": "7a1ad0c350844ee69479b47df9a881cb",
  "group_id": "c77f5e81d9cb4424bf704ef2b0ac7600"
}
```

Example Responses

Status code: 201

Created

```
{
  "variable_value": "192.168.1.5",
  "env_id": "7a1ad0c350844ee69479b47df9a881cb",
  "group_id": "c77f5e81d9cb4424bf704ef2b0ac7600",
  "id": "25054838a624400bbf2267cf5b3a3f70",
  "variable_name": "address"
}
```

Status code: 400

Bad Request

```
{
  "error_code": "APIG.2012",
  "error_msg": "Invalid parameter value,parameterName:instance_id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code": "APIG.1002",
```



```
{
  "error_msg": "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code": "APIG.1005",
  "error_msg": "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code": "APIG.3003",
  "error_msg": "The instance does not exist;id:f0fa1789-3b76-433b-a787-9892951c620ec"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code": "APIG.9999",
  "error_msg": "System error"
}
```

Status Codes

Status Code	Description
201	Created
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.3.2 Deleting a Variable

Function

This API is used to delete an environment variable.

Calling Method

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

URI

DELETE /v2/{project_id}/apigw/instances/{instance_id}/env-variables/{env_variable_id}

Table 3-87 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
env_variable_id	Yes	String	Environment variable ID.

Request Parameters

Table 3-88 Request header parameters

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

Response Parameters

Status code: 401

Table 3-89 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-90 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-91 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-92 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{  
  "error_code" : "APIG.3011",  
  "error_msg" : "The environment variable does not exist, id: 25054838a624400bbf2267cf5b3a3f70"  
}
```

Status code: 500

Internal Server Error

```
{  
  "error_code" : "APIG.9999",  
  "error_msg" : "System error"  
}
```

Status Codes

Status Code	Description
204	No Content
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.3.3 Querying Variable Details

Function

This API is used to query the details of an environment variable.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/env-variables/{env_variable_id}

Table 3-93 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
env_variable_id	Yes	String	Environment variable ID.

Request Parameters

Table 3-94 Request header parameters

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

Response Parameters

Status code: 200

Table 3-95 Response body parameters

Parameter	Type	Description
variable_value	String	The variable value can contain 1 to 255 characters. Only letters, digits, and special characters (_-/:) are allowed.
env_id	String	Environment ID. Minimum: 1 Maximum: 65
group_id	String	API group ID. Minimum: 1 Maximum: 65

Parameter	Type	Description
variable_name	String	Variable name, which can contain 3 to 32 characters, starting with a letter. Only letters, digits, hyphens (-), and underscores (_) are allowed. The variable name is equivalent to "#Name#" in API definitions. Characters between the number signs are case-sensitive. The variable name will be replaced with the variable value after API publication.
id	String	Environment variable ID.

Status code: 401

Table 3-96 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-97 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-98 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-99 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "variable_value" : "192.168.1.5",
  "env_id" : "7a1ad0c350844ee69479b47df9a881cb",
  "group_id" : "c77f5e81d9cb4424bf704ef2b0ac7600",
  "id" : "25054838a624400bbf2267cf5b3a3f70",
  "variable_name" : "address"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3011",
  "error_msg" : "The environment variable does not exist, id: 25054838a624400bbf2267cf5b3a3f70"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.3.4 Querying Environment Variables

Function

This API is used to query all environment variables under an API group.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/env-variables

Table 3-100 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-101 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20
group_id	Yes	String	API group ID.
env_id	No	String	Environment ID.
variable_name	No	String	Variable name.
precise_search	No	String	Parameter name (name) for exact matching.

Request Parameters

Table 3-102 Request header parameters

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

Response Parameters

Status code: 200

Table 3-103 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
variables	Array of EnvVariableInfo objects	Environment variable list.

Table 3-104 EnvVariableInfo

Parameter	Type	Description
variable_value	String	The variable value can contain 1 to 255 characters. Only letters, digits, and special characters (<code>_/.:</code>) are allowed.
env_id	String	Environment ID. Minimum: 1 Maximum: 65
group_id	String	API group ID. Minimum: 1 Maximum: 65
variable_name	String	Variable name, which can contain 3 to 32 characters, starting with a letter. Only letters, digits, hyphens (<code>-</code>), and underscores (<code>_</code>) are allowed. The variable name is equivalent to <code>"#Name#" in API definitions. Characters between the number signs are case-sensitive. The variable name will be replaced with the variable value after API publication.</code>
id	String	Environment variable ID.

Status code: 400

Table 3-105 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-106 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-107 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-108 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "variables" : [ {
    "variable_value" : "8080",
    "env_id" : "cca3616af3684b329064b2a631cb3eeb",
    "group_id" : "73c58022f20d495aa18885d718647f09",
    "id" : "09ab8135722440b9bf5d107f2a09d409",
    "variable_name" : "port"
  }, {
    "variable_value" : "192.168.1.5",
    "env_id" : "7a1ad0c350844ee69479b47df9a881cb",
    "group_id" : "c77f5e81d9cb4424bf704ef2b0ac7600",
    "id" : "25054838a624400bbf2267cf5b3a3f70",
    "variable_name" : "address"
  }
]
```

```
  } ],  
  "total" : 2,  
  "size" : 2  
}
```

Status code: 400

Bad Request

```
{  
  "error_code" : "APIG.2012",  
  "error_msg" : "Invalid parameter value,parameterName:name. Please refer to the support documentation"  
}
```

Status code: 401

Unauthorized

```
{  
  "error_code" : "APIG.1002",  
  "error_msg" : "Incorrect token or token resolution failed"  
}
```

Status code: 403

Forbidden

```
{  
  "error_code" : "APIG.1005",  
  "error_msg" : "No permissions to request this method"  
}
```

Status code: 500

Internal Server Error

```
{  
  "error_code" : "APIG.9999",  
  "error_msg" : "System error"  
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.4 Request Throttling Policy Management

3.4.1 Creating a Request Throttling Policy

Function

After an API goes online, the system attaches a request throttling policy to it by default. The API provider can change the request throttling policy based on the service capabilities and load of the API. A request throttling policy restricts the maximum number of times an API can be called within a specified period.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances/{instance_id}/throttles

Table 3-109 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-110 Request header parameters

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

Table 3-111 Request body parameters

Parameter	Mandatory	Type	Description
app_call_limits	No	Integer	Maximum number of times the API can be accessed by an app within the same period. The value of this parameter cannot exceed the user call limit. The maximum value is 2,147,483,647. Enter a positive integer.
name	Yes	String	Request throttling policy name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, and underscores (_) are allowed.
time_unit	Yes	String	Time unit for limiting the number of API calls. Enumeration values: <ul style="list-style-type: none"> • SECOND • MINUTE • HOUR • DAY
remark	No	String	Description of the request throttling policy, which can contain a maximum of 255 characters.
api_call_limits	Yes	Integer	Maximum number of times an API can be accessed within a specified period. The value of this parameter cannot exceed the default limit 200 TPS. You can change the default limit to meet service requirements. The maximum value is 2,147,483,647. Enter a positive integer.

Parameter	Mandatory	Type	Description
type	No	Integer	Type of the request throttling policy. <ul style="list-style-type: none"> • 1: API-based, limiting the maximum number of times a single API bound to the policy can be called within the specified period. • 2: API-shared, limiting the maximum number of times all APIs bound to the policy can be called within the specified period. Enumeration values: <ul style="list-style-type: none"> • 1 • 2
enable_adaptive_control	No	String	Indicates whether to enable dynamic request throttling. <ul style="list-style-type: none"> • TRUE • FALSE Currently, this parameter is not supported.
user_calls	No	Integer	Maximum number of times the API can be accessed by a user within the same period. The value of this parameter cannot exceed the Max. API Requests. The maximum value is 2,147,483,647. Enter a positive integer.
time_interval	Yes	Integer	Period of time for limiting the number of API calls. This parameter applies with each API call limit. The maximum value is 2,147,483,647. Enter a positive integer.
ip_call_limits	No	Integer	Maximum number of times the API can be accessed by an IP address within the same period. The value of this parameter cannot exceed the API call limit. The maximum value is 2,147,483,647. Enter a positive integer.

Response Parameters

Status code: 201

Table 3-112 Response body parameters

Parameter	Type	Description
app_call_limits	Integer	Maximum number of times the API can be accessed by an app within the same period. The value of this parameter cannot exceed the user call limit. The maximum value is 2,147,483,647. Enter a positive integer.
name	String	Request throttling policy name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, and underscores (_) are allowed.
time_unit	String	Time unit for limiting the number of API calls. Enumeration values: <ul style="list-style-type: none"> • SECOND • MINUTE • HOURL • DAY
remark	String	Description of the request throttling policy, which can contain a maximum of 255 characters.
api_call_limits	Integer	Maximum number of times an API can be accessed within a specified period. The value of this parameter cannot exceed the default limit 200 TPS. You can change the default limit to meet service requirements. The maximum value is 2,147,483,647. Enter a positive integer.
type	Integer	Type of the request throttling policy. <ul style="list-style-type: none"> • 1: API-based, limiting the maximum number of times a single API bound to the policy can be called within the specified period. • 2: API-shared, limiting the maximum number of times all APIs bound to the policy can be called within the specified period. Enumeration values: <ul style="list-style-type: none"> • 1 • 2

Parameter	Type	Description
enable_adaptive_control	String	Indicates whether to enable dynamic request throttling. <ul style="list-style-type: none"> • TRUE • FALSE Currently, this parameter is not supported.
user_call_limits	Integer	Maximum number of times the API can be accessed by a user within the same period. The value of this parameter cannot exceed the Max. API Requests. The maximum value is 2,147,483,647. Enter a positive integer.
time_interval	Integer	Period of time for limiting the number of API calls. This parameter applies with each API call limit. The maximum value is 2,147,483,647. Enter a positive integer.
ip_call_limits	Integer	Maximum number of times the API can be accessed by an IP address within the same period. The value of this parameter cannot exceed the API call limit. The maximum value is 2,147,483,647. Enter a positive integer.
id	String	Request throttling policy ID.
bind_num	Integer	Number of APIs to which the request throttling policy has been bound.
is_included_special_throttle	Integer	Indicates whether an excluded request throttling configuration has been created. <ul style="list-style-type: none"> • 1: yes • 2: no Enumeration values: <ul style="list-style-type: none"> • 1 • 2
create_time	String	Creation time.

Status code: 400

Table 3-113 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-114 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-115 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-116 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Creating a request throttling policy (max. API requests: 800; max. user requests: 500; max. app requests: 300; max. IP address requests: 600; period: 1s)

```
{
  "api_call_limits" : 800,
  "app_call_limits" : 300,
  "enable_adaptive_control" : "FALSE",
  "ip_call_limits" : 600,
  "name" : "throttle_demo",
  "remark" : "Total: 800 calls/second; user: 500 calls/second; app: 300 calls/second; IP address: 600 calls/second",
  "time_interval" : 1,
  "time_unit" : "SECOND",
  "type" : 1,
  "user_call_limits" : 500
}
```

Example Responses

Status code: 201

Created

```
{
  "name" : "throttle_demo",
  "create_time" : "2020-07-31T08:44:02.205366118Z",
  "remark" : "Total: 800 calls/second; user: 500 calls/second; app: 300 calls/second; IP address: 600 calls/second",
  "type" : 1,
  "time_interval" : 1,
  "ip_call_limits" : 600,
  "app_call_limits" : 300,
  "time_unit" : "SECOND",
  "api_call_limits" : 800,
  "id" : "3437448ad06f4e0c91a224183116e965",
  "user_call_limits" : 500,
  "enable_adaptive_control" : "FALSE",
  "bind_num" : 0,
  "is_inclu_special_throttle" : 2
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2011",
  "error_msg" : "Invalid parameter value,parameterName:name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
201	Created
400	Bad Request
401	Unauthorized

Status Code	Description
403	Forbidden
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.4.2 Modifying a Request Throttling Policy

Function

This API is used to modify the information about a request throttling policy.

Calling Method

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

URI

PUT /v2/{project_id}/apigw/instances/{instance_id}/throttles/{throttle_id}

Table 3-117 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
throttle_id	Yes	String	Request throttling policy ID.

Request Parameters

Table 3-118 Request header parameters

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

Table 3-119 Request body parameters

Parameter	Mandatory	Type	Description
app_call_limits	No	Integer	Maximum number of times the API can be accessed by an app within the same period. The value of this parameter cannot exceed the user call limit. The maximum value is 2,147,483,647. Enter a positive integer.
name	Yes	String	Request throttling policy name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, and underscores (_) are allowed.
time_unit	Yes	String	Time unit for limiting the number of API calls. Enumeration values: <ul style="list-style-type: none"> • SECOND • MINUTE • HOUR • DAY
remark	No	String	Description of the request throttling policy, which can contain a maximum of 255 characters.

Parameter	Mandatory	Type	Description
api_call_limits	Yes	Integer	Maximum number of times an API can be accessed within a specified period. The value of this parameter cannot exceed the default limit 200 TPS. You can change the default limit to meet service requirements. The maximum value is 2,147,483,647. Enter a positive integer.
type	No	Integer	Type of the request throttling policy. <ul style="list-style-type: none"> • 1: API-based, limiting the maximum number of times a single API bound to the policy can be called within the specified period. • 2: API-shared, limiting the maximum number of times all APIs bound to the policy can be called within the specified period. Enumeration values: <ul style="list-style-type: none"> • 1 • 2
enable_adaptive_control	No	String	Indicates whether to enable dynamic request throttling. <ul style="list-style-type: none"> • TRUE • FALSE Currently, this parameter is not supported.
user_call_limits	No	Integer	Maximum number of times the API can be accessed by a user within the same period. The value of this parameter cannot exceed the Max. API Requests. The maximum value is 2,147,483,647. Enter a positive integer.
time_interval	Yes	Integer	Period of time for limiting the number of API calls. This parameter applies with each API call limit. The maximum value is 2,147,483,647. Enter a positive integer.

Parameter	Mandatory	Type	Description
ip_call_limits	No	Integer	Maximum number of times the API can be accessed by an IP address within the same period. The value of this parameter cannot exceed the API call limit. The maximum value is 2,147,483,647. Enter a positive integer.

Response Parameters

Status code: 200

Table 3-120 Response body parameters

Parameter	Type	Description
app_call_limits	Integer	Maximum number of times the API can be accessed by an app within the same period. The value of this parameter cannot exceed the user call limit. The maximum value is 2,147,483,647. Enter a positive integer.
name	String	Request throttling policy name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, and underscores (_) are allowed.
time_unit	String	Time unit for limiting the number of API calls. Enumeration values: <ul style="list-style-type: none"> ● SECOND ● MINUTE ● HOUR ● DAY
remark	String	Description of the request throttling policy, which can contain a maximum of 255 characters.
api_call_limits	Integer	Maximum number of times an API can be accessed within a specified period. The value of this parameter cannot exceed the default limit 200 TPS. You can change the default limit to meet service requirements. The maximum value is 2,147,483,647. Enter a positive integer.

Parameter	Type	Description
type	Integer	Type of the request throttling policy. <ul style="list-style-type: none"> • 1: API-based, limiting the maximum number of times a single API bound to the policy can be called within the specified period. • 2: API-shared, limiting the maximum number of times all APIs bound to the policy can be called within the specified period. Enumeration values: <ul style="list-style-type: none"> • 1 • 2
enable_adaptive_control	String	Indicates whether to enable dynamic request throttling. <ul style="list-style-type: none"> • TRUE • FALSE Currently, this parameter is not supported.
user_call_limits	Integer	Maximum number of times the API can be accessed by a user within the same period. The value of this parameter cannot exceed the Max. API Requests. The maximum value is 2,147,483,647. Enter a positive integer.
time_interval	Integer	Period of time for limiting the number of API calls. This parameter applies with each API call limit. The maximum value is 2,147,483,647. Enter a positive integer.
ip_call_limits	Integer	Maximum number of times the API can be accessed by an IP address within the same period. The value of this parameter cannot exceed the API call limit. The maximum value is 2,147,483,647. Enter a positive integer.
id	String	Request throttling policy ID.
bind_num	Integer	Number of APIs to which the request throttling policy has been bound.
is_included_special_throttle	Integer	Indicates whether an excluded request throttling configuration has been created. <ul style="list-style-type: none"> • 1: yes • 2: no Enumeration values: <ul style="list-style-type: none"> • 1 • 2
create_time	String	Creation time.

Status code: 400

Table 3-121 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-122 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-123 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-124 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-125 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Modifying a request throttling policy (max. API requests: 800; max. user requests: 500; max. app requests: 300; max. IP address requests: 600; period: 1s)

```
{
  "name" : "throttle_demo",
  "remark" : "Total: 800 calls/second; user: 500 calls/second; app: 300 calls/second; IP address: 600 calls/second",
  "type" : 1,
  "time_interval" : 1,
  "ip_call_limits" : 600,
  "app_call_limits" : 300,
  "time_unit" : "SECOND",
  "api_call_limits" : 800,
  "user_call_limits" : 500
}
```

Example Responses

Status code: 200

OK

```
{
  "name" : "throttle_demo",
  "create_time" : "2020-07-31T08:44:02.205366118Z",
  "remark" : "Total: 800 calls/second; user: 500 calls/second; app: 300 calls/second; IP address: 600 calls/second",
  "type" : 1,
  "time_interval" : 1,
  "ip_call_limits" : 600,
  "app_call_limits" : 300,
  "time_unit" : "SECOND",
  "api_call_limits" : 800,
  "id" : "3437448ad06f4e0c91a224183116e965",
  "user_call_limits" : 500,
  "enable_adaptive_control" : "FALSE",
  "bind_num" : 0,
  "is_inclu_special_throttle" : 2
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2011",
  "error_msg" : "Invalid parameter value,parameterName:name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
}
```

```
"error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3005",
  "error_msg" : "Request throttling policy 3437448ad06f4e0c91a224183116e965 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.4.3 Deleting a Request Throttling Policy

Function

This API is used to delete a request throttling policy and all binding relationships between the policy and APIs.

Calling Method

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

URI

DELETE /v2/{project_id}/apigw/instances/{instance_id}/throttles/{throttle_id}

Table 3-126 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
throttle_id	Yes	String	Request throttling policy ID.

Request Parameters

Table 3-127 Request header parameters

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

Response Parameters

Status code: 401

Table 3-128 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-129 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-130 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-131 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3005",
  "error_msg" : "Request throttling policy 3437448ad06f4e0c91a224183116e965 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
204	No Content
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.4.4 Querying Request Throttling Policies

Function

This API is used to query all the request throttling policies.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/throttles

Table 3-132 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-133 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20
id	No	String	Request throttling policy ID.
name	No	String	Request throttling policy name.
precise_search	No	String	Parameter name (name) for exact matching.

Request Parameters

Table 3-134 Request header parameters

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

Response Parameters

Status code: 200

Table 3-135 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
throttles	Array of ThrottlesInfo objects	Request throttling policy list.

Table 3-136 ThrottlesInfo

Parameter	Type	Description
app_call_limits	Integer	Maximum number of times the API can be accessed by an app within the same period. The value of this parameter cannot exceed the user call limit. The maximum value is 2,147,483,647. Enter a positive integer.
name	String	Request throttling policy name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, and underscores (_) are allowed.
time_unit	String	Time unit for limiting the number of API calls. Enumeration values: <ul style="list-style-type: none"> • SECOND • MINUTE • HOURL • DAY

Parameter	Type	Description
remark	String	Description of the request throttling policy, which can contain a maximum of 255 characters.
api_call_limits	Integer	Maximum number of times an API can be accessed within a specified period. The value of this parameter cannot exceed the default limit 200 TPS. You can change the default limit to meet service requirements. The maximum value is 2,147,483,647. Enter a positive integer.
type	Integer	Type of the request throttling policy. <ul style="list-style-type: none"> • 1: API-based, limiting the maximum number of times a single API bound to the policy can be called within the specified period. • 2: API-shared, limiting the maximum number of times all APIs bound to the policy can be called within the specified period. Enumeration values: <ul style="list-style-type: none"> • 1 • 2
enable_adaptive_control	String	Indicates whether to enable dynamic request throttling. <ul style="list-style-type: none"> • TRUE • FALSE Currently, this parameter is not supported.
user_call_limits	Integer	Maximum number of times the API can be accessed by a user within the same period. The value of this parameter cannot exceed the Max. API Requests. The maximum value is 2,147,483,647. Enter a positive integer.
time_interval	Integer	Period of time for limiting the number of API calls. This parameter applies with each API call limit. The maximum value is 2,147,483,647. Enter a positive integer.
ip_call_limits	Integer	Maximum number of times the API can be accessed by an IP address within the same period. The value of this parameter cannot exceed the API call limit. The maximum value is 2,147,483,647. Enter a positive integer.
id	String	Request throttling policy ID.
bind_num	Integer	Number of APIs to which the request throttling policy has been bound.

Parameter	Type	Description
is_includ_speci al_throttle	Integer	Indicates whether an excluded request throttling configuration has been created. <ul style="list-style-type: none"> • 1: yes • 2: no Enumeration values: <ul style="list-style-type: none"> • 1 • 2
create_time	String	Creation time.

Status code: 400

Table 3-137 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-138 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-139 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-140 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total" : 1,
  "size" : 1,
  "throttles" : [ {
    "name" : "throttle_demo",
    "create_time" : "2020-07-31T08:44:02.205366118Z",
    "remark" : "Total: 800 calls/second; user: 500 calls/second; app: 300 calls/second; IP address: 600 calls/second",
    "type" : 1,
    "time_interval" : 1,
    "ip_call_limits" : 600,
    "app_call_limits" : 300,
    "time_unit" : "SECOND",
    "api_call_limits" : 800,
    "id" : "3437448ad06f4e0c91a224183116e965",
    "user_call_limits" : 500,
    "enable_adaptive_control" : "FALSE",
    "bind_num" : 0,
    "is_inclu_special_throttle" : 2
  } ]
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
```

```
"error_msg" : "No permissions to request this method"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.4.5 Querying Details of a Request Throttling Policy

Function

This API is used to query the details of a request throttling policy.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/throttles/{throttle_id}

Table 3-141 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
throttle_id	Yes	String	Request throttling policy ID.

Request Parameters

Table 3-142 Request header parameters

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

Response Parameters

Status code: 200

Table 3-143 Response body parameters

Parameter	Type	Description
app_call_limits	Integer	Maximum number of times the API can be accessed by an app within the same period. The value of this parameter cannot exceed the user call limit. The maximum value is 2,147,483,647. Enter a positive integer.
name	String	Request throttling policy name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, and underscores (_) are allowed.
time_unit	String	Time unit for limiting the number of API calls. Enumeration values: <ul style="list-style-type: none"> ● SECOND ● MINUTE ● HOUR ● DAY

Parameter	Type	Description
remark	String	Description of the request throttling policy, which can contain a maximum of 255 characters.
api_call_limits	Integer	Maximum number of times an API can be accessed within a specified period. The value of this parameter cannot exceed the default limit 200 TPS. You can change the default limit to meet service requirements. The maximum value is 2,147,483,647. Enter a positive integer.
type	Integer	Type of the request throttling policy. <ul style="list-style-type: none"> • 1: API-based, limiting the maximum number of times a single API bound to the policy can be called within the specified period. • 2: API-shared, limiting the maximum number of times all APIs bound to the policy can be called within the specified period. Enumeration values: <ul style="list-style-type: none"> • 1 • 2
enable_adaptive_control	String	Indicates whether to enable dynamic request throttling. <ul style="list-style-type: none"> • TRUE • FALSE Currently, this parameter is not supported.
user_call_limits	Integer	Maximum number of times the API can be accessed by a user within the same period. The value of this parameter cannot exceed the Max. API Requests. The maximum value is 2,147,483,647. Enter a positive integer.
time_interval	Integer	Period of time for limiting the number of API calls. This parameter applies with each API call limit. The maximum value is 2,147,483,647. Enter a positive integer.
ip_call_limits	Integer	Maximum number of times the API can be accessed by an IP address within the same period. The value of this parameter cannot exceed the API call limit. The maximum value is 2,147,483,647. Enter a positive integer.
id	String	Request throttling policy ID.
bind_num	Integer	Number of APIs to which the request throttling policy has been bound.

Parameter	Type	Description
is_inclu_speci al_throttle	Integer	Indicates whether an excluded request throttling configuration has been created. <ul style="list-style-type: none"> • 1: yes • 2: no Enumeration values: <ul style="list-style-type: none"> • 1 • 2
create_time	String	Creation time.

Status code: 401

Table 3-144 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-145 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-146 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-147 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "name" : "throttle_demo",
  "create_time" : "2020-07-31T08:44:02.205366118Z",
  "remark" : "Total: 800 calls/second; user: 500 calls/second; app: 300 calls/second; IP address: 600 calls/second",
  "type" : 1,
  "time_interval" : 1,
  "ip_call_limits" : 600,
  "app_call_limits" : 300,
  "time_unit" : "SECOND",
  "api_call_limits" : 800,
  "id" : "3437448ad06f4e0c91a224183116e965",
  "user_call_limits" : 500,
  "enable_adaptive_control" : "FALSE",
  "bind_num" : 0,
  "is_inclu_special_throttle" : 2
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3005",
  "error_msg" : "Request throttling policy 3437448ad06f4e0c91a224183116e965 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.5 API Management

3.5.1 Creating an API

Function

This API is used to create an API. An API is an interface that encapsulates a set of service capabilities.

The definition of an API defines how the API is called by users and how APIG accesses the actual backend service requested by users. APIG supports four backend types: HTTP/HTTPS, FunctionGraph, and Mock.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances/{instance_id}/apis

Table 3-148 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-149 Request header parameters

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

Table 3-150 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	API name. It can contain 3 to 255 characters, starting with a letter or digit. Only letters, digits, and these special characters are allowed: -_./:()
type	Yes	Integer	API type. <ul style="list-style-type: none"> 1: public API 2: private API Enumeration values: <ul style="list-style-type: none"> 1 2
version	No	String	API version. Maximum: 16

Parameter	Mandatory	Type	Description
req_protocol	Yes	String	<p>API request protocol:</p> <ul style="list-style-type: none"> • HTTP • HTTPS • BOTH: Both HTTP and HTTPS are supported. <p>Default: HTTPS</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • HTTP • HTTPS • BOTH
req_method	Yes	String	<p>API request method.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • GET • POST • PUT • DELETE • HEAD • PATCH • OPTIONS • ANY
req_uri	Yes	String	<p>Request address, which can contain request parameters enclosed with braces ({}). For example, /getUserInfo/{userId}. Special characters, such as asterisks (*), slashes (/), percent signs (%), hyphens (-), underscores (_), and periods (.), are allowed. It can contain a maximum of 512 characters and must comply with URI specifications.</p> <p>NOTE The address must comply with the URI specifications.</p>

Parameter	Mandatory	Type	Description
auth_type	Yes	String	API authentication mode. <ul style="list-style-type: none"> • NONE • APP • IAM • AUTHORIZER Enumeration values: <ul style="list-style-type: none"> • NONE • APP • IAM • AUTHORIZER
auth_opt	No	AuthOpt object	Security authentication parameter.
cors	No	Boolean	Indicates whether CORS is supported. <ul style="list-style-type: none"> • TRUE: supported • FALSE: not supported Default: false Enumeration values: <ul style="list-style-type: none"> • true • false
match_mode	No	String	API matching mode: <ul style="list-style-type: none"> • SWA: Prefix match • NORMAL: Exact match Default value: NORMAL Enumeration values: <ul style="list-style-type: none"> • SWA • NORMAL
backend_type	Yes	String	Backend type. Options: <ul style="list-style-type: none"> • HTTP: web backend • FUNCTION: FunctionGraph backend. When backend_type is set to FUNCTION, the func_info field is mandatory. • MOCK: mock backend. Enumeration values: <ul style="list-style-type: none"> • HTTP • FUNCTION • MOCK

Parameter	Mandatory	Type	Description
remark	No	String	API description. It cannot exceed 255 characters.
group_id	Yes	String	ID of the API group to which the API belongs.
body_remark	No	String	API request body, which can be an example request body, media type, or parameters. Ensure that the request body does not exceed 20,480 characters.
result_normal_sample	No	String	Example response for a successful request. Ensure that the response does not exceed 20,480 characters.
result_failure_sample	No	String	Example response for a failed request. Ensure that the response does not exceed 20,480 characters.
authorizer_id	No	String	ID of the frontend custom authorizer.
tags	No	Array of strings	<p>Tag.</p> <p>Use letters, digits, and special characters (-*#%.:_) and start with a letter.</p> <p>By default, 10 tags are supported. To increase the quota, contact technical support to modify the API_TAG_NUM_LIMIT configuration.</p> <p>Minimum: 1</p> <p>Maximum: 128</p>
response_id	No	String	Group response ID.
roma_app_id	No	String	Integration application ID. Currently, this parameter is not supported.
domain_name	No	String	<p>Custom domain name bound to the API.</p> <p>Currently, this parameter is not supported.</p>

Parameter	Mandatory	Type	Description
tag	No	String	Tag. This field will be deprecated. You can use the tags field instead.
content_type	No	String	Request content type: <ul style="list-style-type: none"> • application/json • application/xml • multipart/form-data • text/plain Coming soon. Enumeration values: <ul style="list-style-type: none"> • application/json • application/xml • multipart/form-data • text/plain
mock_info	No	ApiMockCreate object	Mock backend details.
func_info	No	ApiFuncCreate object	FunctionGraph backend details.
req_params	No	Array of ReqParamBase objects	Request parameters.
backend_params	No	Array of BackendParamBase objects	Backend parameters.
policy_mocks	No	Array of ApiPolicyMockCreate objects	Mock backend policies.
policy_functions	No	Array of ApiPolicyFunctionCreate objects	FunctionGraph backend policies.
backend_api	No	BackendApiCreate object	Web backend details.
policy_https	No	Array of ApiPolicyHttpCreate objects	Web backend policies.

Table 3-151 AuthOpt

Parameter	Mandatory	Type	Description
app_code_auth_type	No	String	<p>Indicates whether AppCode authentication is enabled. This parameter is valid only if auth_type is set to App. The default value is DISABLE.</p> <ul style="list-style-type: none"> • DISABLE: AppCode authentication is disabled. • HEADER: AppCode authentication is enabled and the AppCode is located in the header. <p>Default: DISABLE</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • DISABLE • HEADER

Table 3-152 ApiMockCreate

Parameter	Mandatory	Type	Description
remark	No	String	Description. It cannot exceed 255 characters.
result_content	No	String	Response.
version	No	String	Function version. It cannot exceed 64 characters.
authorizer_id	No	String	Backend custom authorizer ID.

Table 3-153 ApiFuncCreate

Parameter	Mandatory	Type	Description
function_urn	Yes	String	Function URN.
remark	No	String	Description. It cannot exceed 255 characters.

Parameter	Mandatory	Type	Description
invocation_type	Yes	String	Invocation mode. <ul style="list-style-type: none"> • async: asynchronous • sync: synchronous Enumeration values: <ul style="list-style-type: none"> • async • sync
network_type	Yes	String	Function network architecture. <ul style="list-style-type: none"> • V1: non-VPC • V2: VPC Enumeration values: <ul style="list-style-type: none"> • V1 • V2
version	No	String	Function version. If both a function alias URN and version are passed, only the alias URN will be used. Maximum: 64
alias_urn	No	String	Function alias URN. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored.
timeout	Yes	Integer	Timeout allowed for APIG to request the backend service. If the function network architecture is set to V1, the maximum timeout is 60,000. If the network architecture is set to V2, the maximum timeout is 600,000 and can be modified by using the gateway parameter backend_timeout. Unit: ms. Minimum: 1
authorizer_id	No	String	Backend custom authorizer ID.

Table 3-154 ReqParamBase

Parameter	Mandatory	Type	Description
name	Yes	String	Parameter name. The parameter name can contain 1 to 32 characters and must start with a letter. Only letters, digits, hyphens (-), underscores (_), and periods (.) are allowed.
type	Yes	String	Parameter type. Enumeration values: <ul style="list-style-type: none"> • STRING • NUMBER
location	Yes	String	Parameter location. Enumeration values: <ul style="list-style-type: none"> • PATH • QUERY • HEADER
default_value	No	String	Default value.
sample_value	No	String	Example value.
required	No	Integer	Indicates whether the parameter is required. 1: yes 2: no The value of this parameter is 1 if Location is set to PATH, and 2 if Location is set to another value. Enumeration values: <ul style="list-style-type: none"> • 1 • 2
valid_enable	No	Integer	Indicates whether validity check is enabled. <ul style="list-style-type: none"> • 1: enabled • 2: disabled Default: 2 Enumeration values: <ul style="list-style-type: none"> • 1 • 2
remark	No	String	Description. It cannot exceed 255 characters.

Parameter	Mandatory	Type	Description
enumerations	No	String	Enumerated value.
min_num	No	Integer	Minimum value. This parameter is valid when type is set to NUMBER.
max_num	No	Integer	Maximum value. This parameter is valid when type is set to NUMBER.
min_size	No	Integer	Minimum length. This parameter is valid when type is set to STRING.
max_size	No	Integer	Maximum length. This parameter is valid when type is set to STRING.
regular	No	String	Regular expression validation rule. Currently, this parameter is not supported.
json_schema	No	String	JSON validation rule. Currently, this parameter is not supported.
pass_through	No	Integer	Indicates whether to transparently transfer the parameter. 1: yes 2: no Enumeration values: <ul style="list-style-type: none"> • 1 • 2

Table 3-155 ApiPolicyMockCreate

Parameter	Mandatory	Type	Description
result_content	No	String	Response.
effect_mode	Yes	String	Effective mode of the backend policy. <ul style="list-style-type: none"> • ALL: All conditions are met. • ANY: Any condition is met. Enumeration values: <ul style="list-style-type: none"> • ALL • ANY

Parameter	Mandatory	Type	Description
name	Yes	String	Backend name. It must start with a letter and can contain letters, digits, and underscores (_). Minimum: 3 Maximum: 64
backend_params	No	Array of BackendParamBase objects	Backend parameters.
conditions	Yes	Array of ApiConditionBase objects	Policy conditions.
authorizer_id	No	String	Backend custom authorizer ID.

Table 3-156 ApiPolicyFunctionCreate

Parameter	Mandatory	Type	Description
function_urn	Yes	String	Function URN.
invocation_type	Yes	String	Invocation mode. <ul style="list-style-type: none"> • async: asynchronous • sync: synchronous Enumeration values: <ul style="list-style-type: none"> • async • sync
network_type	Yes	String	Function network architecture. <ul style="list-style-type: none"> • V1: non-VPC • V2: VPC Enumeration values: <ul style="list-style-type: none"> • V1 • V2
version	No	String	Function version. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored. Maximum: 64

Parameter	Mandatory	Type	Description
alias_urn	No	String	Function alias URN. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored.
timeout	No	Integer	Timeout allowed for APIG to request the backend service. If the function network architecture is set to V1, the maximum timeout is 60,000. If the network architecture is set to V2, the maximum timeout is 600,000 and can be modified by using the gateway parameter backend_timeout. Unit: ms. Minimum: 1
effect_mode	Yes	String	Effective mode of the backend policy. <ul style="list-style-type: none"> • ALL: All conditions are met. • ANY: Any condition is met. Enumeration values: <ul style="list-style-type: none"> • ALL • ANY
name	Yes	String	Backend name. It must start with a letter and can contain letters, digits, and underscores (_). Minimum: 3 Maximum: 64
backend_parameters	No	Array of BackendParameterBase objects	Backend parameters.
conditions	Yes	Array of ApiConditionBase objects	Policy conditions.
authorizer_id	No	String	Backend custom authorizer ID.

Table 3-157 BackendApiCreate

Parameter	Mandatory	Type	Description
authorizer_id	No	String	Backend custom authorizer ID.
url_domain	No	String	Backend service address. A backend service address consists of a domain name or IP address and a port number, with not more than 255 characters. It must be in the format "Host name:Port number", for example, apig.example.com:7443. If the port number is not specified, the default HTTPS port 443 or the default HTTP port 80 is used. Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.
req_protocol	Yes	String	Request protocol. Enumeration values: <ul style="list-style-type: none"> • HTTP • HTTPS
remark	No	String	Description. It cannot exceed 255 characters.
req_method	Yes	String	Request method. Enumeration values: <ul style="list-style-type: none"> • GET • POST • PUT • DELETE • HEAD • PATCH • OPTIONS • ANY
version	No	String	Web backend version, which can contain a maximum of 16 characters.

Parameter	Mandatory	Type	Description
req_uri	Yes	String	<p>Request address, which can contain request parameters enclosed with braces ({}). For example, /getUserInfo/{userId}. Special characters, such as asterisks (*), slashes (/), percent signs (%), hyphens (-), underscores (_), and periods (.), are allowed. It can contain a maximum of 512 characters and must comply with URI specifications.</p> <p>Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.</p> <p>NOTE The address must comply with the URI specifications.</p>
timeout	Yes	Integer	<p>Timeout allowed for APIG to request the backend service. You can set the maximum timeout using the backend_timeout configuration item. The maximum value is 600,000.</p> <p>Unit: ms.</p> <p>Minimum: 1</p>
enable_client_ssl	No	Boolean	Indicates whether to enable two-way authentication.
retry_count	No	String	<p>Number of retry attempts to request the backend service. The default value is -1. The value ranges from -1 to 10.</p> <p>-1 indicates that idempotent APIs will retry once and non-idempotent APIs will not retry. POST and PATCH are non-idempotent. GET, HEAD, PUT, OPTIONS, and DELETE are idempotent.</p> <p>Default: -1</p>

Parameter	Mandatory	Type	Description
vpc_channel_info	No	ApiBackendVpcReq object	VPC channel details. This parameter is required if vpc_channel_status is set to 1.
vpc_channel_status	No	Integer	Indicates whether to use a VPC channel. <ul style="list-style-type: none"> • 1: A VPC channel is used. • 2: No VPC channel is used. Enumeration values: <ul style="list-style-type: none"> • 1 • 2

Table 3-158 ApiPolicyHttpCreate

Parameter	Mandatory	Type	Description
url_domain	No	String	Endpoint of the policy backend. An endpoint consists of a domain name or IP address and a port number, with not more than 255 characters. It must be in the format "Domain name:Port number", for example, apig.example.com:7443. If the port number is not specified, the default HTTPS port 443 or the default HTTP port 80 is used. Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.
req_protocol	Yes	String	Request protocol. Options include HTTP, HTTPS. Enumeration values: <ul style="list-style-type: none"> • HTTP • HTTPS

Parameter	Mandatory	Type	Description
req_method	Yes	String	<p>Request method. Options include GET, POST, PUT, DELETE, HEAD, PATCH, OPTIONS, and ANY.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • GET • POST • PUT • DELETE • HEAD • PATCH • OPTIONS • ANY
req_uri	Yes	String	<p>Request address, which can contain request parameters enclosed with braces ({}). For example, /getUserInfo/{userId}. Special characters, such as asterisks (*), slashes (/), percent signs (%), hyphens (-), underscores (_), and periods (.), are allowed. It can contain a maximum of 512 characters and must comply with URI specifications.</p> <p>Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.</p> <p>NOTE The address must comply with the URI specifications.</p>
timeout	No	Integer	<p>Timeout allowed for APIG to request the backend service. You can set the maximum timeout using the backend_timeout configuration item. The maximum value is 600,000.</p> <p>Unit: ms.</p> <p>Minimum: 1</p>

Parameter	Mandatory	Type	Description
retry_count	No	String	Number of retry attempts to request the backend service. The default value is -1. The value ranges from -1 to 10. -1 indicates that idempotent APIs will retry once and non-idempotent APIs will not retry. POST and PATCH are non-idempotent. GET, HEAD, PUT, OPTIONS, and DELETE are idempotent. Default: -1
effect_mode	Yes	String	Effective mode of the backend policy. <ul style="list-style-type: none"> • ALL: All conditions are met. • ANY: Any condition is met. Enumeration values: <ul style="list-style-type: none"> • ALL • ANY
name	Yes	String	Backend name. It must start with a letter and can contain letters, digits, and underscores (_). Minimum: 3 Maximum: 64
backend_params	No	Array of BackendParamBase objects	Backend parameters.
conditions	Yes	Array of ApiConditionBase objects	Policy conditions.
authorizer_id	No	String	Backend custom authorizer ID.
vpc_channel_info	No	ApiBackendVpcReq object	VPC channel details. This parameter is required if vpc_channel_status is set to 1.

Parameter	Mandatory	Type	Description
vpc_channel_status	No	Integer	Indicates whether to use a VPC channel. <ul style="list-style-type: none"> • 1: A VPC channel is used. • 2: No VPC channel is used. Enumeration values: <ul style="list-style-type: none"> • 1 • 2

Table 3-159 BackendParamBase

Parameter	Mandatory	Type	Description
origin	Yes	String	Parameter type. <ul style="list-style-type: none"> • REQUEST: backend parameter • CONSTANT: constant parameter • SYSTEM: system parameter Enumeration values: <ul style="list-style-type: none"> • REQUEST • CONSTANT • SYSTEM
name	Yes	String	Parameter name. The parameter name must start with a letter and can only contain letters, digits, hyphens (-), underscores (_), and periods (.). Minimum: 1 Maximum: 32
remark	No	String	Description, which can contain a maximum of 255 characters.
location	Yes	String	Parameter location. The value can be PATH, QUERY, or HEADER. Enumeration values: <ul style="list-style-type: none"> • PATH • QUERY • HEADER

Parameter	Mandatory	Type	Description
value	Yes	String	<p>Parameter value, which can contain a maximum of 255 characters.</p> <p>If the origin type is REQUEST, the value of this parameter is the parameter name in req_params.</p> <p>If the origin type is CONSTANT, the value is a constant.</p> <p>If the origin type is SYSTEM, the value is a system parameter name. System parameters include gateway parameters, frontend authentication parameters, and backend authentication parameters. You can set the frontend or backend authentication parameters after enabling custom frontend or backend authentication.</p> <p>The gateway parameters are as follows:</p> <ul style="list-style-type: none"> • \$context.sourcelp: source IP address of the API caller. • \$context.stage: deployment environment in which the API is called. • \$context.apild: API ID. • \$context.appld: ID of the app used by the API caller. • \$context.requestId: request ID generated when the API is called. • \$context.serverAddr: address of the gateway server. • \$context.serverName: name of the gateway server. • \$context.handleTime: time when the API request is processed. • \$context.providerAppId: ID of the app used by the API

Parameter	Mandatory	Type	Description
			<p>owner. This parameter is currently not supported.</p> <p>Frontend authentication parameter: prefixed with "\$context.authorizer.frontend." . For example, to return "aaa" upon successful custom authentication, set this parameter to "\$context.authorizer.frontend.aaa".</p> <p>Backend authentication parameter: prefixed with "\$context.authorizer.backend." . For example, to return "aaa" upon successful custom authentication, set this parameter to "\$context.authorizer.backend.aaa".</p>

Table 3-160 ApiConditionBase

Parameter	Mandatory	Type	Description
req_param_name	No	String	Input parameter name. This parameter is required if the policy type is param.
condition_type	No	String	<p>Policy condition.</p> <ul style="list-style-type: none"> exact: Exact match enum: Enumeration pattern: Regular expression <p>This parameter is required when the policy type is param.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> exact enum pattern

Parameter	Mandatory	Type	Description
condition_origin	Yes	String	Policy type <ul style="list-style-type: none"> param: parameter source: source IP address Enumeration values: <ul style="list-style-type: none"> param source
condition_value	Yes	String	Condition value.

Table 3-161 ApiBackendVpcReq

Parameter	Mandatory	Type	Description
vpc_channel_proxy_host	No	String	Proxy host.
vpc_channel_id	Yes	String	VPC channel ID.

Response Parameters

Status code: 201

Table 3-162 Response body parameters

Parameter	Type	Description
name	String	API name. It can contain 3 to 255 characters, starting with a letter or digit. Only letters, digits, and these special characters are allowed: -_./:()
type	Integer	API type. <ul style="list-style-type: none"> 1: public API 2: private API Enumeration values: <ul style="list-style-type: none"> 1 2
version	String	API version. Maximum: 16

Parameter	Type	Description
req_protocol	String	<p>API request protocol:</p> <ul style="list-style-type: none"> • HTTP • HTTPS • BOTH: Both HTTP and HTTPS are supported. <p>Default: HTTPS</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • HTTP • HTTPS • BOTH
req_method	String	<p>API request method.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • GET • POST • PUT • DELETE • HEAD • PATCH • OPTIONS • ANY
req_uri	String	<p>Request address, which can contain request parameters enclosed with braces ({}). For example, /getUserInfo/{userId}. Special characters, such as asterisks (*), slashes (/), percent signs (%), hyphens (-), underscores (_), and periods (.), are allowed. It can contain a maximum of 512 characters and must comply with URI specifications.</p> <p>NOTE The address must comply with the URI specifications.</p>
auth_type	String	<p>API authentication mode. Options:</p> <ul style="list-style-type: none"> • NONE • APP • IAM • AUTHORIZER <p>Enumeration values:</p> <ul style="list-style-type: none"> • NONE • APP • IAM • AUTHORIZER

Parameter	Type	Description
auth_opt	AuthOpt object	Security authentication parameter.
cors	Boolean	Indicates whether CORS is supported. <ul style="list-style-type: none"> TRUE: supported FALSE: not supported Default: false Enumeration values: <ul style="list-style-type: none"> true false
match_mode	String	API matching mode: <ul style="list-style-type: none"> SWA: Prefix match NORMAL: Exact match Default value: NORMAL Enumeration values: <ul style="list-style-type: none"> SWA NORMAL
backend_type	String	Backend type. Options: <ul style="list-style-type: none"> HTTP: web backend FUNCTION: FunctionGraph backend. When backend_type is set to FUNCTION, the func_info field is mandatory. MOCK: mock backend. When backend_type is set to MOCK, the mock_info field is mandatory. Enumeration values: <ul style="list-style-type: none"> HTTP FUNCTION MOCK
remark	String	API description. It cannot exceed 255 characters.
group_id	String	ID of the API group to which the API belongs.
body_remark	String	API request body, which can be an example request body, media type, or parameters. Ensure that the request body does not exceed 20,480 characters.
result_normal_sample	String	Example response for a successful request. Ensure that the response does not exceed 20,480 characters. This is unavailable if the request protocol is set to GRPC.

Parameter	Type	Description
result_failure_sample	String	Example response for a failed request. Ensure that the response does not exceed 20,480 characters. This is unavailable if the request protocol is set to GRPC.
authorizer_id	String	Custom authorizer ID. This is unavailable if the request protocol is set to GRPC.
tags	Array of strings	Tag. Use letters, digits, and special characters (-*#%.:_) and start with a letter. By default, 10 tags are supported. To increase the quota, contact technical support to modify the API_TAG_NUM_LIMIT configuration. Minimum: 1 Maximum: 128
response_id	String	Group response ID.
roma_app_id	String	Integration application ID. Currently, this parameter is not supported.
domain_name	String	Custom domain name bound to the API. Currently, this parameter is not supported.
tag	String	Tag. This field will be deprecated. You can use the tags field instead.
content_type	String	Request content type: <ul style="list-style-type: none"> • application/json • application/xml • multipart/form-data • text/plain Coming soon. Enumeration values: <ul style="list-style-type: none"> • application/json • application/xml • multipart/form-data • text/plain
id	String	API ID.
status	Integer	App status. <ul style="list-style-type: none"> • 1: valid

Parameter	Type	Description
arrange_necessary	Integer	Indicates whether to enable orchestration.
register_time	String	Time when the API is registered.
update_time	String	Time when the API was last modified.
group_name	String	Name of the API group to which the API belongs.
group_version	String	Version of the API group to which the API belongs. The default value is V1. Other versions are not supported. Default: V1
run_env_id	String	ID of the environment in which the API has been published. Separate multiple environment IDs with vertical bars ().
run_env_name	String	Name of the environment in which the API has been published. Separate multiple environment names with vertical bars ().
publish_id	String	Publication record ID. Separate multiple publication record IDs with vertical bars ().
publish_time	String	Publication time. Separate the time of multiple publication records with vertical bars ().
roma_app_name	String	Name of the integration application to which the API belongs. Currently, this parameter is not supported.
ld_api_id	String	ID of the corresponding custom backend API. Currently, this parameter is not supported.
backend_api	BackendApi object	Web backend details.
api_group_info	ApiGroupCommonInfo object	API group information.
func_info	ApiFunc object	FunctionGraph backend details.

Parameter	Type	Description
mock_info	ApiMock object	Mock backend details.
req_params	Array of ReqParam objects	Request parameters.
backend_params	Array of BackendParam objects	Backend parameters.
policy_functions	Array of ApiPolicyFunctionResp objects	FunctionGraph backend policies.
policy_mocks	Array of ApiPolicyMockResp objects	Mock backend policies.
policy_https	Array of ApiPolicyHttpResp objects	Web backend policies.

Table 3-163 AuthOpt

Parameter	Type	Description
app_code_auth_type	String	<p>Indicates whether AppCode authentication is enabled. This parameter is valid only if auth_type is set to App. The default value is DISABLE.</p> <ul style="list-style-type: none"> • DISABLE: AppCode authentication is disabled. • HEADER: AppCode authentication is enabled and the AppCode is located in the header. <p>Default: DISABLE Enumeration values:</p> <ul style="list-style-type: none"> • DISABLE • HEADER

Table 3-164 BackendApi

Parameter	Type	Description
authorizer_id	String	Backend custom authorizer ID.

Parameter	Type	Description
url_domain	String	Backend service address. A backend service address consists of a domain name or IP address and a port number, with not more than 255 characters. It must be in the format "Host name:Port number", for example, apig.example.com:7443. If the port number is not specified, the default HTTPS port 443 or the default HTTP port 80 is used. Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.
req_protocol	String	Request protocol. Enumeration values: <ul style="list-style-type: none"> • HTTP • HTTPS
remark	String	Description. It cannot exceed 255 characters.
req_method	String	Request method. Enumeration values: <ul style="list-style-type: none"> • GET • POST • PUT • DELETE • HEAD • PATCH • OPTIONS • ANY
version	String	Web backend version, which can contain a maximum of 16 characters.

Parameter	Type	Description
req_uri	String	Request address, which can contain request parameters enclosed with braces ({}). For example, /getUserInfo/{userId}. Special characters, such as asterisks (*), slashes (/), percent signs (%), hyphens (-), underscores (_), and periods (.), are allowed. It can contain a maximum of 512 characters and must comply with URI specifications. Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed. NOTE The address must comply with the URI specifications.
timeout	Integer	Timeout allowed for APIG to request the backend service. You can set the maximum timeout using the backend_timeout configuration item. The maximum value is 600,000. Unit: ms. Minimum: 1
enable_client_ssl	Boolean	Indicates whether to enable two-way authentication.
retry_count	String	Number of retry attempts to request the backend service. The default value is -1. The value ranges from -1 to 10. -1 indicates that idempotent APIs will retry once and non-idempotent APIs will not retry. POST and PATCH are non-idempotent. GET, HEAD, PUT, OPTIONS, and DELETE are idempotent. Default: -1
id	String	ID.
status	Integer	Backend service status. <ul style="list-style-type: none">1: valid
register_time	String	Registration time.
update_time	String	Update time.
vpc_channel_info	VpcInfo object	VPC channel details. This parameter is required if vpc_channel_status is set to 1.
vpc_channel_status	Integer	Indicates whether to use a VPC channel. <ul style="list-style-type: none">1: A VPC channel is used.2: No VPC channel is used.

Table 3-165 ApiGroupCommonInfo

Parameter	Type	Description
id	String	ID.
name	String	API group name.
status	Integer	Status. <ul style="list-style-type: none"> • 1: valid Enumeration values: <ul style="list-style-type: none"> • 1
sl_domain	String	Subdomain name that APIG automatically allocates to the API group.
register_time	String	Creation time.
update_time	String	Last modification time.
on_sell_status	Integer	Indicates whether the API group has been listed on KooGallery. <ul style="list-style-type: none"> • 1: listed • 2: not listed • 3: under review Not supported currently.
url_domains	Array of UrlDomain objects	Independent domain names bound to the API group.

Table 3-166 UrlDomain

Parameter	Type	Description
id	String	Domain ID.
domain	String	Domain name.
cname_status	Integer	CNAME resolution status of the domain name. <ul style="list-style-type: none"> • 1: not resolved • 2: resolving • 3: resolved • 4: resolution failed
ssl_id	String	SSL certificate ID.
ssl_name	String	SSL certificate name.

Parameter	Type	Description
min_ssl_version	String	Minimum SSL version. TLS 1.1 and TLS 1.2 are supported. Default: TLSv1.1 Enumeration values: <ul style="list-style-type: none"> • TLSv1.1 • TLSv1.2
verified_client_certificate_enabled	Boolean	Whether to enable client certificate verification. This parameter is available only when a certificate is bound. It is enabled by default if trusted_root_ca exists, and disabled if trusted_root_ca does not exist. Default: false
is_has_trusted_root_ca	Boolean	Whether a trusted root certificate (CA) exists. The value is true if trusted_root_ca exists in the bound certificate. Default: false

Table 3-167 ApiFunc

Parameter	Type	Description
function_urn	String	Function URN.
remark	String	Description. It cannot exceed 255 characters.
invocation_type	String	Invocation mode. <ul style="list-style-type: none"> • async: asynchronous • sync: synchronous Enumeration values: <ul style="list-style-type: none"> • async • sync
network_type	String	Function network architecture. <ul style="list-style-type: none"> • V1: non-VPC • V2: VPC Enumeration values: <ul style="list-style-type: none"> • V1 • V2
version	String	Function version. If both a function alias URN and version are passed, only the alias URN will be used. Maximum: 64

Parameter	Type	Description
alias_urn	String	Function alias URN. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored.
timeout	Integer	Timeout allowed for APIG to request the backend service. If the function network architecture is set to V1, the maximum timeout is 60,000. If the network architecture is set to V2, the maximum timeout is 600,000 and can be modified by using the gateway parameter backend_timeout. Unit: ms. Minimum: 1
authorizer_id	String	Backend custom authorizer ID.
id	String	ID.
register_time	String	Registration time.
status	Integer	Backend service status. <ul style="list-style-type: none"> 1: valid
update_time	String	Update time.

Table 3-168 ApiMock

Parameter	Type	Description
remark	String	Description. It cannot exceed 255 characters.
result_content	String	Response.
version	String	Function version. It cannot exceed 64 characters.
authorizer_id	String	Backend custom authorizer ID.
id	String	ID.
register_time	String	Registration time.
status	Integer	Backend service status. <ul style="list-style-type: none"> 1: valid
update_time	String	Update time.

Table 3-169 ReqParam

Parameter	Type	Description
name	String	Parameter name. The parameter name can contain 1 to 32 characters and must start with a letter. Only letters, digits, hyphens (-), underscores (_), and periods (.) are allowed.
type	String	Parameter type. Enumeration values: <ul style="list-style-type: none"> • STRING • NUMBER
location	String	Parameter location. Enumeration values: <ul style="list-style-type: none"> • PATH • QUERY • HEADER
default_value	String	Default value.
sample_value	String	Example value.
required	Integer	Indicates whether the parameter is required. 1: yes 2: no The value of this parameter is 1 if Location is set to PATH, and 2 if Location is set to another value. Enumeration values: <ul style="list-style-type: none"> • 1 • 2
valid_enable	Integer	Indicates whether validity check is enabled. <ul style="list-style-type: none"> • 1: enabled • 2: disabled Default: 2 Enumeration values: <ul style="list-style-type: none"> • 1 • 2
remark	String	Description. It cannot exceed 255 characters.
enumerations	String	Enumerated value.
min_num	Integer	Minimum value. This parameter is valid when type is set to NUMBER.

Parameter	Type	Description
max_num	Integer	Maximum value. This parameter is valid when type is set to NUMBER.
min_size	Integer	Minimum length. This parameter is valid when type is set to STRING.
max_size	Integer	Maximum length. This parameter is valid when type is set to STRING.
regular	String	Regular expression validation rule. Currently, this parameter is not supported.
json_schema	String	JSON validation rule. Currently, this parameter is not supported.
pass_through	Integer	Indicates whether to transparently transfer the parameter. 1: yes 2: no Enumeration values: <ul style="list-style-type: none"> • 1 • 2
id	String	Parameter ID.

Table 3-170 ApiPolicyFunctionResp

Parameter	Type	Description
function_urn	String	Function URN.
invocation_type	String	Invocation mode. <ul style="list-style-type: none"> • async: asynchronous • sync: synchronous Enumeration values: <ul style="list-style-type: none"> • async • sync
network_type	String	Function network architecture. <ul style="list-style-type: none"> • V1: non-VPC • V2: VPC Enumeration values: <ul style="list-style-type: none"> • V1 • V2

Parameter	Type	Description
version	String	Function version. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored. Maximum: 64
alias_urn	String	Function alias URN. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored.
timeout	Integer	Timeout allowed for APIG to request the backend service. If the function network architecture is set to V1, the maximum timeout is 60,000. If the network architecture is set to V2, the maximum timeout is 600,000 and can be modified by using the gateway parameter <code>backend_timeout</code> . Unit: ms. Minimum: 1
id	String	ID.
effect_mode	String	Effective mode of the backend policy. <ul style="list-style-type: none"> • ALL: All conditions are met. • ANY: Any condition is met. Enumeration values: <ul style="list-style-type: none"> • ALL • ANY
name	String	Backend name, which must start with a letter and can contain letters, digits, and underscores (_). Minimum: 3 Maximum: 64
backend_parameters	Array of BackendParam objects	Backend parameters.
conditions	Array of ConditionResp objects	Policy conditions.
authorizer_id	String	Backend custom authorizer ID.

Table 3-171 ApiPolicyMockResp

Parameter	Type	Description
id	String	ID.
effect_mode	String	Effective mode of the backend policy. <ul style="list-style-type: none"> • ALL: All conditions are met. • ANY: Any condition is met. Enumeration values: <ul style="list-style-type: none"> • ALL • ANY
name	String	Backend name, which must start with a letter and can contain letters, digits, and underscores (_). Minimum: 3 Maximum: 64
backend_params	Array of BackendParam objects	Backend parameters.
conditions	Array of ConditionResp objects	Policy conditions.
authorizer_id	String	Backend custom authorizer ID.
result_content	String	Response.

Table 3-172 ApiPolicyHttpResp

Parameter	Type	Description
id	String	ID.
effect_mode	String	Effective mode of the backend policy. <ul style="list-style-type: none"> • ALL: All conditions are met. • ANY: Any condition is met. Enumeration values: <ul style="list-style-type: none"> • ALL • ANY
name	String	Backend name, which must start with a letter and can contain letters, digits, and underscores (_). Minimum: 3 Maximum: 64

Parameter	Type	Description
backend_params	Array of BackendParam objects	Backend parameters.
conditions	Array of ConditionResp objects	Policy conditions.
authorizer_id	String	Backend custom authorizer ID.
url_domain	String	Endpoint of the policy backend. An endpoint consists of a domain name or IP address and a port number, with not more than 255 characters. It must be in the format "Domain name:Port number", for example, apig.example.com:7443. If the port number is not specified, the default HTTPS port 443 or the default HTTP port 80 is used. Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.
req_protocol	String	Request protocol. Options include HTTP, HTTPS. Enumeration values: <ul style="list-style-type: none"> • HTTP • HTTPS
req_method	String	Request method. Options include GET, POST, PUT, DELETE, HEAD, PATCH, OPTIONS, and ANY. Enumeration values: <ul style="list-style-type: none"> • GET • POST • PUT • DELETE • HEAD • PATCH • OPTIONS • ANY

Parameter	Type	Description
req_uri	String	<p>Request address, which can contain request parameters enclosed with braces ({}). For example, /getUserInfo/{userId}. Special characters, such as asterisks (*), slashes (/), percent signs (%), hyphens (-), underscores (_), and periods (.), are allowed. It can contain a maximum of 512 characters and must comply with URI specifications.</p> <p>Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.</p> <p>NOTE The address must comply with the URI specifications.</p>
timeout	Integer	<p>Timeout allowed for APIG to request the backend service. You can set the maximum timeout using the backend_timeout configuration item. The maximum value is 600,000.</p> <p>Unit: ms. Minimum: 1</p>
retry_count	String	<p>Number of retry attempts to request the backend service. The default value is -1. The value ranges from -1 to 10.</p> <p>-1 indicates that idempotent APIs will retry once and non-idempotent APIs will not retry. POST and PATCH are non-idempotent. GET, HEAD, PUT, OPTIONS, and DELETE are idempotent.</p> <p>Default: -1</p>
vpc_channel_info	VpcInfo object	VPC channel details. This parameter is required if vpc_channel_status is set to 1.
vpc_channel_status	Integer	<p>Indicates whether to use a VPC channel.</p> <ul style="list-style-type: none"> • 1: A VPC channel is used. • 2: No VPC channel is used.

Table 3-173 BackendParam

Parameter	Type	Description
origin	String	Parameter type. <ul style="list-style-type: none"> ● REQUEST: backend parameter ● CONSTANT: constant parameter ● SYSTEM: system parameter Enumeration values: <ul style="list-style-type: none"> ● REQUEST ● CONSTANT ● SYSTEM
name	String	Parameter name. The parameter name must start with a letter and can only contain letters, digits, hyphens (-), underscores (_), and periods (.). Minimum: 1 Maximum: 32
remark	String	Description, which can contain a maximum of 255 characters.
location	String	Parameter location. The value can be PATH, QUERY, or HEADER. Enumeration values: <ul style="list-style-type: none"> ● PATH ● QUERY ● HEADER

Parameter	Type	Description
value	String	<p>Parameter value, which can contain a maximum of 255 characters.</p> <p>If the origin type is REQUEST, the value of this parameter is the parameter name in req_params.</p> <p>If the origin type is CONSTANT, the value is a constant.</p> <p>If the origin type is SYSTEM, the value is a system parameter name. System parameters include gateway parameters, frontend authentication parameters, and backend authentication parameters. You can set the frontend or backend authentication parameters after enabling custom frontend or backend authentication.</p> <p>The gateway parameters are as follows:</p> <ul style="list-style-type: none"> • \$context.sourceIp: source IP address of the API caller. • \$context.stage: deployment environment in which the API is called. • \$context.apid: API ID. • \$context.appid: ID of the app used by the API caller. • \$context.requestId: request ID generated when the API is called. • \$context.serverAddr: address of the gateway server. • \$context.serverName: name of the gateway server. • \$context.handleTime: time when the API request is processed. • \$context.providerAppId: ID of the app used by the API owner. This parameter is currently not supported. <p>Frontend authentication parameter: prefixed with "\$context.authorizer.frontend.". For example, to return "aaa" upon successful custom authentication, set this parameter to "\$context.authorizer.frontend.aaa".</p> <p>Backend authentication parameter: prefixed with "\$context.authorizer.backend.". For example, to return "aaa" upon successful custom authentication, set this parameter to "\$context.authorizer.backend.aaa".</p>
id	String	Parameter ID.

Parameter	Type	Description
req_param_id	String	Request parameter ID.

Table 3-174 ConditionResp

Parameter	Type	Description
req_param_name	String	Input parameter name. This parameter is required if the policy type is param.
condition_type	String	Policy condition. <ul style="list-style-type: none"> exact: Exact match enum: Enumeration pattern: Regular expression This parameter is required when the policy type is param. Enumeration values: <ul style="list-style-type: none"> exact enum pattern
condition_origin	String	Policy type <ul style="list-style-type: none"> param: parameter source: source IP address Enumeration values: <ul style="list-style-type: none"> param source
condition_value	String	Condition value.
id	String	ID.
req_param_id	String	Input parameter ID.
req_param_location	String	Input parameter location.

Table 3-175 VpcInfo

Parameter	Type	Description
ecs_id	String	Cloud server ID.
ecs_name	String	Cloud server name.

Parameter	Type	Description
cascade_flag	Boolean	Indicates whether to use the cascading mode. Currently, this parameter is not supported.
vpc_channel_proxy_host	String	Proxy host.
vpc_channel_id	String	VPC channel ID.
vpc_channel_port	Integer	VPC channel port.

Status code: 400

Table 3-176 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-177 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-178 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-179 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-180 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

- Creating a web backend API

```
{
  "group_id": "c77f5e81d9cb4424bf704ef2b0ac7600",
  "match_mode": "NORMAL",
  "name": "Api_http",
  "auth_type": "AUTHORIZER",
  "authorizer_id": "0d982c1ac3da493dae47627b6439fc5c",
  "backend_type": "HTTP",
  "backend_api": {
    "url_domain": "192.168.189.156:12346",
    "req_protocol": "HTTP",
    "req_method": "GET",
    "req_uri": "/test/benchmark",
    "timeout": 5000,
    "retry_count": "-1"
  },
  "req_protocol": "HTTPS",
  "req_uri": "/test/http",
  "remark": "Web backend API",
  "type": 1,
  "req_method": "GET",
  "result_normal_sample": "Example success response",
  "result_failure_sample": "Example failure response",
  "tags": [ "webApi" ],
  "req_params": [ {
    "name": "query_demo",
    "location": "QUERY",
    "type": "STRING",
    "required": 1
  }, {
    "name": "header-demo",
    "location": "HEADER",
    "type": "STRING",
    "required": 2
  } ],
  "backend_params": [ {
    "name": "backHeader",
    "value": "header-demo",
    "location": "HEADER",
    "origin": "REQUEST"
  }, {
```

```
"name" : "backQuery",
"value" : "query_demo",
"location" : "QUERY",
"origin" : "REQUEST"
}, {
"name" : "X-CONSTANT-HEADER",
"value" : "demo",
"location" : "HEADER",
"origin" : "CONSTANT",
"remark" : "constant_demo"
}, {
"name" : "app-id",
"value" : "$context.appld",
"location" : "HEADER",
"origin" : "SYSTEM",
"remark" : "App ID of the API caller"
}]
}
```

- **Creating a FunctionGraph backend API**

```
{
  "group_id" : "c77f5e81d9cb4424bf704ef2b0ac7600",
  "match_mode" : "NORMAL",
  "name" : "Api_function",
  "auth_type" : "APP",
  "backend_type" : "FUNCTION",
  "func_info" : {
    "authorizer_id" : "5b8cd3f06f004115aec69c58f57272c9",
    "function_urn" : "urn:fss:xxx-7:73d69ae0cfcf460190522d06b60f05ad:function:default:auto_testfunc93749",
    "invocation_type" : "sync",
    "network_type" : "V1",
    "timeout" : 5000,
    "version" : "latest",
    "alias_urn" :
    "urn:fss:region01:73d69ae0cfcf460190522d06b60f05ad:function:default:auto_testfunc93749:!a1"
  },
  "req_protocol" : "HTTPS",
  "req_uri" : "/test/function",
  "remark" : "FunctionGraph backend API",
  "type" : 1,
  "req_method" : "GET",
  "result_normal_sample" : "Example success response",
  "result_failure_sample" : "Example failure response",
  "tags" : [ "functionApi" ]
}
```

- **Creating a Mock backend API**

```
{
  "group_id" : "c77f5e81d9cb4424bf704ef2b0ac7600",
  "match_mode" : "SWA",
  "name" : "Api_mock",
  "auth_type" : "IAM",
  "backend_type" : "MOCK",
  "mock_info" : {
    "result_content" : "mock success"
  },
  "policy_mocks" : [ {
    "name" : "Mock policy backend",
    "effect_mode" : "ANY",
    "result_content" : "mock policy success",
    "conditions" : [ {
      "condition_origin" : "source",
      "condition_value" : "1.0.1.0"
    } ]
  } ],
  "req_protocol" : "HTTPS",
  "req_uri" : "/test/mock",
  "remark" : "Mock backend API",
  "type" : 1,
}
```

```
"req_method": "GET",
"result_normal_sample": "Example success response",
"result_failure_sample": "Example failure response",
"tags": [ "mockApi" ]
}
```

Example Responses

Status code: 201

Created

- Example 1

```
{
  "id": "5f918d104dc84480a75166ba99efff21",
  "tags": [ "webApi" ],
  "arrange_necessary": 2,
  "backend_type": "HTTP",
  "auth_type": "AUTHORIZER",
  "auth_opt": {
    "app_code_auth_type": "DISABLE"
  },
  "authorizer_id": "0d982c1ac3da493dae47627b6439fc5c",
  "backend_api": {
    "update_time": "2020-07-31T12:42:51.325312994Z",
    "vpc_channel_status": 2,
    "url_domain": "xxx.xxx.xxx.xxx:12346",
    "req_protocol": "HTTP",
    "id": "1ce8fda3586d4371bd83c955df37e102",
    "req_method": "GET",
    "register_time": "2020-07-31T12:42:51.325312721Z",
    "req_uri": "/benchmark",
    "timeout": 5000,
    "status": 1,
    "retry_count": "-1"
  },
  "cors": false,
  "status": 1,
  "group_name": "api_group_001",
  "group_id": "c77f5e81d9cb4424bf704ef2b0ac7600",
  "group_version": "V1",
  "response_id": "981e6c8f847f47199a9faf4409b751a5",
  "match_mode": "NORMAL",
  "name": "Api_http",
  "req_protocol": "HTTPS",
  "req_method": "GET",
  "req_uri": "/test/http",
  "type": 1,
  "result_normal_sample": "Example success response",
  "result_failure_sample": "Example failure response",
  "version": "V0.0.1",
  "register_time": "2020-07-31T12:42:51.314357035Z",
  "update_time": "2020-07-31T12:42:51.314357324Z",
  "remark": "Web backend API",
  "req_params": [ {
    "name": "query_demo",
    "location": "QUERY",
    "type": "STRING",
    "valid_enable": 2,
    "required": 1,
    "id": "57c8bf3c97ef40ee94eace95dff30014",
    "pass_through": 1
  }, {
    "name": "header-demo",
    "location": "HEADER",
    "type": "STRING",
    "valid_enable": 2,
    "required": 2,
  }
}
```

```
"id" : "8d993be96980415faa6b1fb2ebd647e0",
"pass_through" : 1
}],
"backend_params" : [ {
  "name" : "backHeader",
  "value" : "header-demo",
  "location" : "HEADER",
  "origin" : "REQUEST",
  "id" : "709f0ea376b44aaf907aaaa37d8cce92",
  "req_param_id" : "8d993be96980415faa6b1fb2ebd647e0"
}, {
  "name" : "backQuery",
  "value" : "query_demo",
  "location" : "QUERY",
  "origin" : "REQUEST",
  "id" : "2f152d0fb54445039158d29c2a4f69ee",
  "req_param_id" : "57c8bf3c97ef40ee94eace95dff30014"
}, {
  "name" : "X-CONSTANT-HEADER",
  "value" : "demo",
  "location" : "HEADER",
  "origin" : "CONSTANT",
  "remark" : "constant_demo",
  "id" : "20142102c6aa4f3c97d5fd6ef4010ac2"
}, {
  "name" : "app-id",
  "value" : "$context.appld",
  "location" : "HEADER",
  "origin" : "SYSTEM",
  "remark" : "App ID of the API caller",
  "id" : "a1349c61016e4d999ca783a50bfeee2b"
}
]
}
```

- Example 2

```
{
  "id" : "abd9c4b2ff974888b0ba79be7e6b2763",
  "arrange_necessary" : 2,
  "group_id" : "c77f5e81d9cb4424bf704ef2b0ac7600",
  "group_name" : "api_group_001",
  "group_version" : "V1",
  "match_mode" : "NORMAL",
  "name" : "Api_function",
  "auth_type" : "APP",
  "auth_opt" : {
    "auth_code_auth_type" : "DISABLE"
  },
  "backend_type" : "FUNCTION",
  "func_info" : {
    "id" : "c0740524cd4c40e3801a7afe5375f8b0",
    "authorizer_id" : "5b8cd3f06f004115aec69c58f57272c9",
    "function_urn" : "urn:fss:xxx-xxx-7:73d69ae0cfcf460190522d06b60f05ad:function:default:auto_testfunc93749",
    "invocation_type" : "sync",
    "network_type" : "V1",
    "timeout" : 5000,
    "version" : "latest",
    "alias_urn" :
"urn:fss:region01:73d69ae0cfcf460190522d06b60f05ad:function:default:auto_testfunc00000:!a1",
    "register_time" : "2020-08-02T15:36:19.897262803Z",
    "update_time" : "2020-08-02T15:36:19.897262993Z",
    "status" : 1
  },
  "cors" : false,
  "req_protocol" : "HTTPS",
  "req_uri" : "/test/function",
  "remark" : "FunctionGraph backend API",
  "type" : 1,
  "version" : "V0.0.1",
  "status" : 1,
}
```

```
"req_method": "GET",
"result_normal_sample": "Example success response",
"result_failure_sample": "Example failure response",
"tags": [ "functionApi" ],
"register_time": "2020-08-02T15:36:19.892012381Z",
"update_time": "2020-08-02T15:36:19.892012627Z"
}
```

- Example 3

```
{
  "id": "3a955b791bd24b1c9cd94c745f8d1aad",
  "arrange_necessary": 2,
  "group_id": "c77f5e81d9cb4424bf704ef2b0ac7600",
  "group_name": "api_group_001",
  "group_version": "V1",
  "match_mode": "SWA",
  "name": "Api_mock",
  "auth_type": "IAM",
  "auth_opt": {
    "auth_code_auth_type": "DISABLE"
  },
  "backend_type": "MOCK",
  "mock_info": {
    "id": "e74bbc75825c4c38ae84ccab6bdc6175",
    "result_content": "mock success",
    "update_time": "2020-08-02T15:56:52.301790686Z",
    "register_time": "2020-08-02T15:56:52.301790367Z"
  },
  "policy_mocks": [ {
    "name": "Mock policy backend",
    "id": "1cb05173a4c84b7d996e30145cce3c7d",
    "effect_mode": "ANY",
    "result_content": "mock policy success",
    "conditions": [ {
      "condition_origin": "source",
      "condition_value": "1.0.1.0",
      "id": "8650b3a94e7344df8251658d8aee1f6d"
    } ]
  } ],
  "cors": false,
  "req_protocol": "HTTPS",
  "req_uri": "/test/mock",
  "remark": "Mock backend API",
  "type": 1,
  "version": "V0.0.1",
  "req_method": "GET",
  "result_normal_sample": "Example success response",
  "result_failure_sample": "Example failure response",
  "tags": [ "mockApi" ],
  "register_time": "2020-08-02T15:56:52.286099413Z",
  "update_time": "2020-08-02T15:56:52.286099715Z",
  "status": 1
}
```

Status code: 400

Bad Request

```
{
  "error_code": "APIG.2011",
  "error_msg": "Invalid parameter value,parameterName:name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code": "APIG.1002",
  "error_msg": "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{  
  "error_code" : "APIG.1005",  
  "error_msg" : "No permissions to request this method"  
}
```

Status code: 404

Not Found

```
{  
  "error_code" : "APIG.3019",  
  "error_msg" : "The function URN does not exist"  
}
```

Status code: 500

Internal Server Error

```
{  
  "error_code" : "APIG.9999",  
  "error_msg" : "System error"  
}
```

Status Codes

Status Code	Description
201	Created
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.5.2 Modifying an API

Function

This API is used to modify the information about an API, including its backend information.

Calling Method

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

URI

PUT /v2/{project_id}/apigw/instances/{instance_id}/apis/{api_id}

Table 3-181 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
api_id	Yes	String	API ID.

Request Parameters

Table 3-182 Request header parameters

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

Table 3-183 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	API name. It can contain 3 to 255 characters, starting with a letter or digit. Only letters, digits, and these special characters are allowed: -_./:()
type	Yes	Integer	API type. <ul style="list-style-type: none"> 1: public API 2: private API Enumeration values: <ul style="list-style-type: none"> 1 2

Parameter	Mandatory	Type	Description
version	No	String	API version. Maximum: 16
req_protocol	Yes	String	API request protocol: <ul style="list-style-type: none"> • HTTP • HTTPS • BOTH: Both HTTP and HTTPS are supported. Default: HTTPS Enumeration values: <ul style="list-style-type: none"> • HTTP • HTTPS • BOTH
req_method	Yes	String	API request method. Enumeration values: <ul style="list-style-type: none"> • GET • POST • PUT • DELETE • HEAD • PATCH • OPTIONS • ANY
req_uri	Yes	String	Request address, which can contain request parameters enclosed with braces ({}). For example, /getUserInfo/{userId}. Special characters, such as asterisks (*), slashes (/), percent signs (%), hyphens (-), underscores (_), and periods (.), are allowed. It can contain a maximum of 512 characters and must comply with URI specifications. NOTE The address must comply with the URI specifications.

Parameter	Mandatory	Type	Description
auth_type	Yes	String	<p>API authentication mode.</p> <p>Options:</p> <ul style="list-style-type: none"> • NONE • APP • IAM • AUTHORIZER: custom authentication. When auth_type is set to AUTHORIZER, the authorizer_id field is mandatory. <p>Enumeration values:</p> <ul style="list-style-type: none"> • NONE • APP • IAM • AUTHORIZER
auth_opt	No	AuthOpt object	Security authentication parameter.
cors	No	Boolean	<p>Indicates whether CORS is supported.</p> <ul style="list-style-type: none"> • TRUE: supported • FALSE: not supported <p>Default: false</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • true • false
match_mode	No	String	<p>API matching mode:</p> <ul style="list-style-type: none"> • SWA: Prefix match • NORMAL: Exact match <p>Default value: NORMAL</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • SWA • NORMAL

Parameter	Mandatory	Type	Description
backend_type	Yes	String	Backend type. Options: <ul style="list-style-type: none"> • HTTP: web backend • FUNCTION: FunctionGraph backend. When backend_type is set to FUNCTION, the func_info field is mandatory. • MOCK: mock backend. When backend_type is set to MOCK, the mock_info field is mandatory. Enumeration values: <ul style="list-style-type: none"> • HTTP • FUNCTION • MOCK
remark	No	String	API description. It cannot exceed 255 characters.
group_id	Yes	String	ID of the API group to which the API belongs.
body_remark	No	String	API request body, which can be an example request body, media type, or parameters. Ensure that the request body does not exceed 20,480 characters.
result_normal_sample	No	String	Example response for a successful request. Ensure that the response does not exceed 20,480 characters.
result_failure_sample	No	String	Example response for a failed request. Ensure that the response does not exceed 20,480 characters.
authorizer_id	No	String	ID of the frontend custom authorizer.

Parameter	Mandatory	Type	Description
tags	No	Array of strings	<p>Tag.</p> <p>Use letters, digits, and special characters (-*#%:_.) and start with a letter.</p> <p>By default, 10 tags are supported. To increase the quota, contact technical support to modify the API_TAG_NUM_LIMIT configuration.</p> <p>Minimum: 1</p> <p>Maximum: 128</p>
response_id	No	String	Group response ID.
roma_app_id	No	String	Integration application ID. Currently, this parameter is not supported.
domain_name	No	String	<p>Custom domain name bound to the API.</p> <p>Currently, this parameter is not supported.</p>
tag	No	String	<p>Tag.</p> <p>This field will be deprecated. You can use the tags field instead.</p>
content_type	No	String	<p>Request content type:</p> <ul style="list-style-type: none"> • application/json • application/xml • multipart/form-data • text/plain <p>Coming soon.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • application/json • application/xml • multipart/form-data • text/plain
mock_info	No	ApiMockCreate object	Mock backend details.
func_info	No	ApiFuncCreate object	FunctionGraph backend details.

Parameter	Mandatory	Type	Description
req_params	No	Array of ReqParamBase objects	Request parameters.
backend_params	No	Array of BackendParamBase objects	Backend parameters.
policy_mocks	No	Array of ApiPolicyMockCreate objects	Mock backend policies.
policy_functions	No	Array of ApiPolicyFunctionCreate objects	FunctionGraph backend policies.
backend_api	No	BackendApiCreate object	Web backend details.
policy_https	No	Array of ApiPolicyHttpCreate objects	Web backend policies.

Table 3-184 AuthOpt

Parameter	Mandatory	Type	Description
app_code_auth_type	No	String	<p>Indicates whether AppCode authentication is enabled. This parameter is valid only if auth_type is set to App. The default value is DISABLE.</p> <ul style="list-style-type: none"> • DISABLE: AppCode authentication is disabled. • HEADER: AppCode authentication is enabled and the AppCode is located in the header. <p>Default: DISABLE</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • DISABLE • HEADER

Table 3-185 ApiMockCreate

Parameter	Mandatory	Type	Description
remark	No	String	Description. It cannot exceed 255 characters.
result_content	No	String	Response.
version	No	String	Function version. It cannot exceed 64 characters.
authorizer_id	No	String	Backend custom authorizer ID.

Table 3-186 ApiFuncCreate

Parameter	Mandatory	Type	Description
function_urn	Yes	String	Function URN.
remark	No	String	Description. It cannot exceed 255 characters.
invocation_type	Yes	String	Invocation mode. <ul style="list-style-type: none"> • <code>async</code>: asynchronous • <code>sync</code>: synchronous Enumeration values: <ul style="list-style-type: none"> • async • sync
network_type	Yes	String	Function network architecture. <ul style="list-style-type: none"> • <code>V1</code>: non-VPC • <code>V2</code>: VPC Enumeration values: <ul style="list-style-type: none"> • V1 • V2
version	No	String	Function version. If both a function alias URN and version are passed, only the alias URN will be used. Maximum: 64
alias_urn	No	String	Function alias URN. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored.

Parameter	Mandatory	Type	Description
timeout	Yes	Integer	Timeout allowed for APIG to request the backend service. If the function network architecture is set to V1, the maximum timeout is 60,000. If the network architecture is set to V2, the maximum timeout is 600,000 and can be modified by using the gateway parameter backend_timeout. Unit: ms. Minimum: 1
authorizer_id	No	String	Backend custom authorizer ID.

Table 3-187 ReqParamBase

Parameter	Mandatory	Type	Description
name	Yes	String	Parameter name. The parameter name can contain 1 to 32 characters and must start with a letter. Only letters, digits, hyphens (-), underscores (_), and periods (.) are allowed.
type	Yes	String	Parameter type. Enumeration values: <ul style="list-style-type: none"> • STRING • NUMBER
location	Yes	String	Parameter location. Enumeration values: <ul style="list-style-type: none"> • PATH • QUERY • HEADER
default_value	No	String	Default value.
sample_value	No	String	Example value.

Parameter	Mandatory	Type	Description
required	No	Integer	Indicates whether the parameter is required. 1: yes 2: no The value of this parameter is 1 if Location is set to PATH, and 2 if Location is set to another value. Enumeration values: <ul style="list-style-type: none"> • 1 • 2
valid_enable	No	Integer	Indicates whether validity check is enabled. <ul style="list-style-type: none"> • 1: enabled • 2: disabled Default: 2 Enumeration values: <ul style="list-style-type: none"> • 1 • 2
remark	No	String	Description. It cannot exceed 255 characters.
enumerations	No	String	Enumerated value.
min_num	No	Integer	Minimum value. This parameter is valid when type is set to NUMBER.
max_num	No	Integer	Maximum value. This parameter is valid when type is set to NUMBER.
min_size	No	Integer	Minimum length. This parameter is valid when type is set to STRING.
max_size	No	Integer	Maximum length. This parameter is valid when type is set to STRING.
regular	No	String	Regular expression validation rule. Currently, this parameter is not supported.

Parameter	Mandatory	Type	Description
json_schema	No	String	JSON validation rule. Currently, this parameter is not supported.
pass_through	No	Integer	Indicates whether to transparently transfer the parameter. 1: yes 2: no Enumeration values: <ul style="list-style-type: none"> • 1 • 2

Table 3-188 ApiPolicyMockCreate

Parameter	Mandatory	Type	Description
result_content	No	String	Response.
effect_mode	Yes	String	Effective mode of the backend policy. <ul style="list-style-type: none"> • ALL: All conditions are met. • ANY: Any condition is met. Enumeration values: <ul style="list-style-type: none"> • ALL • ANY
name	Yes	String	Backend name. It must start with a letter and can contain letters, digits, and underscores (_). Minimum: 3 Maximum: 64
backend_params	No	Array of BackendParamBase objects	Backend parameters.
conditions	Yes	Array of ApiConditionBase objects	Policy conditions.
authorizer_id	No	String	Backend custom authorizer ID.

Table 3-189 ApiPolicyFunctionCreate

Parameter	Mandatory	Type	Description
function_urn	Yes	String	Function URN.
invocation_type	Yes	String	Invocation mode. <ul style="list-style-type: none"> • <code>async</code>: asynchronous • <code>sync</code>: synchronous Enumeration values: <ul style="list-style-type: none"> • async • sync
network_type	Yes	String	Function network architecture. <ul style="list-style-type: none"> • <code>V1</code>: non-VPC • <code>V2</code>: VPC Enumeration values: <ul style="list-style-type: none"> • V1 • V2
version	No	String	Function version. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored. Maximum: 64
alias_urn	No	String	Function alias URN. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored.
timeout	No	Integer	Timeout allowed for APIG to request the backend service. If the function network architecture is set to <code>V1</code> , the maximum timeout is 60,000. If the network architecture is set to <code>V2</code> , the maximum timeout is 600,000 and can be modified by using the gateway parameter <code>backend_timeout</code> . Unit: ms. Minimum: 1

Parameter	Mandatory	Type	Description
effect_mode	Yes	String	Effective mode of the backend policy. <ul style="list-style-type: none"> • ALL: All conditions are met. • ANY: Any condition is met. Enumeration values: <ul style="list-style-type: none"> • ALL • ANY
name	Yes	String	Backend name. It must start with a letter and can contain letters, digits, and underscores (_). Minimum: 3 Maximum: 64
backend_params	No	Array of BackendParameterBase objects	Backend parameters.
conditions	Yes	Array of ApiConditionBase objects	Policy conditions.
authorizer_id	No	String	Backend custom authorizer ID.

Table 3-190 BackendApiCreate

Parameter	Mandatory	Type	Description
authorizer_id	No	String	Backend custom authorizer ID.

Parameter	Mandatory	Type	Description
url_domain	No	String	Backend service address. A backend service address consists of a domain name or IP address and a port number, with not more than 255 characters. It must be in the format "Host name:Port number", for example, apig.example.com:7443. If the port number is not specified, the default HTTPS port 443 or the default HTTP port 80 is used. Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.
req_protocol	Yes	String	Request protocol. Enumeration values: <ul style="list-style-type: none"> • HTTP • HTTPS
remark	No	String	Description. It cannot exceed 255 characters.
req_method	Yes	String	Request method. Enumeration values: <ul style="list-style-type: none"> • GET • POST • PUT • DELETE • HEAD • PATCH • OPTIONS • ANY
version	No	String	Web backend version, which can contain a maximum of 16 characters.

Parameter	Mandatory	Type	Description
req_uri	Yes	String	<p>Request address, which can contain request parameters enclosed with braces ({}). For example, /getUserInfo/{userId}. Special characters, such as asterisks (*), slashes (/), percent signs (%), hyphens (-), underscores (_), and periods (.), are allowed. It can contain a maximum of 512 characters and must comply with URI specifications.</p> <p>Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.</p> <p>NOTE The address must comply with the URI specifications.</p>
timeout	Yes	Integer	<p>Timeout allowed for APIG to request the backend service. You can set the maximum timeout using the backend_timeout configuration item. The maximum value is 600,000.</p> <p>Unit: ms.</p> <p>Minimum: 1</p>
enable_client_ssl	No	Boolean	Indicates whether to enable two-way authentication.
retry_count	No	String	<p>Number of retry attempts to request the backend service. The default value is -1. The value ranges from -1 to 10.</p> <p>-1 indicates that idempotent APIs will retry once and non-idempotent APIs will not retry. POST and PATCH are non-idempotent. GET, HEAD, PUT, OPTIONS, and DELETE are idempotent.</p> <p>Default: -1</p>

Parameter	Mandatory	Type	Description
vpc_channel_info	No	ApiBackendVpcReq object	VPC channel details. This parameter is required if vpc_channel_status is set to 1.
vpc_channel_status	No	Integer	Indicates whether to use a VPC channel. <ul style="list-style-type: none"> • 1: A VPC channel is used. • 2: No VPC channel is used. Enumeration values: <ul style="list-style-type: none"> • 1 • 2

Table 3-191 ApiPolicyHttpCreate

Parameter	Mandatory	Type	Description
url_domain	No	String	Endpoint of the policy backend. An endpoint consists of a domain name or IP address and a port number, with not more than 255 characters. It must be in the format "Domain name:Port number", for example, apig.example.com:7443. If the port number is not specified, the default HTTPS port 443 or the default HTTP port 80 is used. Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.
req_protocol	Yes	String	Request protocol. Options include HTTP, HTTPS. Enumeration values: <ul style="list-style-type: none"> • HTTP • HTTPS

Parameter	Mandatory	Type	Description
req_method	Yes	String	Request method. Options include GET, POST, PUT, DELETE, HEAD, PATCH, OPTIONS, and ANY. Enumeration values: <ul style="list-style-type: none"> • GET • POST • PUT • DELETE • HEAD • PATCH • OPTIONS • ANY
req_uri	Yes	String	Request address, which can contain request parameters enclosed with braces ({}). For example, /getUserInfo/{userId}. Special characters, such as asterisks (*), slashes (/), percent signs (%), hyphens (-), underscores (_), and periods (.), are allowed. It can contain a maximum of 512 characters and must comply with URI specifications. Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed. NOTE The address must comply with the URI specifications.
timeout	No	Integer	Timeout allowed for APIG to request the backend service. You can set the maximum timeout using the backend_timeout configuration item. The maximum value is 600,000. Unit: ms. Minimum: 1

Parameter	Mandatory	Type	Description
retry_count	No	String	Number of retry attempts to request the backend service. The default value is -1. The value ranges from -1 to 10. -1 indicates that idempotent APIs will retry once and non-idempotent APIs will not retry. POST and PATCH are non-idempotent. GET, HEAD, PUT, OPTIONS, and DELETE are idempotent. Default: -1
effect_mode	Yes	String	Effective mode of the backend policy. <ul style="list-style-type: none"> • ALL: All conditions are met. • ANY: Any condition is met. Enumeration values: <ul style="list-style-type: none"> • ALL • ANY
name	Yes	String	Backend name. It must start with a letter and can contain letters, digits, and underscores (_). Minimum: 3 Maximum: 64
backend_params	No	Array of BackendParamBase objects	Backend parameters.
conditions	Yes	Array of ApiConditionBase objects	Policy conditions.
authorizer_id	No	String	Backend custom authorizer ID.
vpc_channel_info	No	ApiBackendVpcReq object	VPC channel details. This parameter is required if vpc_channel_status is set to 1.

Parameter	Mandatory	Type	Description
vpc_channel_status	No	Integer	Indicates whether to use a VPC channel. <ul style="list-style-type: none"> • 1: A VPC channel is used. • 2: No VPC channel is used. Enumeration values: <ul style="list-style-type: none"> • 1 • 2

Table 3-192 BackendParamBase

Parameter	Mandatory	Type	Description
origin	Yes	String	Parameter type. <ul style="list-style-type: none"> • REQUEST: backend parameter • CONSTANT: constant parameter • SYSTEM: system parameter Enumeration values: <ul style="list-style-type: none"> • REQUEST • CONSTANT • SYSTEM
name	Yes	String	Parameter name. The parameter name must start with a letter and can only contain letters, digits, hyphens (-), underscores (_), and periods (.). Minimum: 1 Maximum: 32
remark	No	String	Description, which can contain a maximum of 255 characters.
location	Yes	String	Parameter location. The value can be PATH, QUERY, or HEADER. Enumeration values: <ul style="list-style-type: none"> • PATH • QUERY • HEADER

Parameter	Mandatory	Type	Description
value	Yes	String	<p>Parameter value, which can contain a maximum of 255 characters.</p> <p>If the origin type is REQUEST, the value of this parameter is the parameter name in req_params.</p> <p>If the origin type is CONSTANT, the value is a constant.</p> <p>If the origin type is SYSTEM, the value is a system parameter name. System parameters include gateway parameters, frontend authentication parameters, and backend authentication parameters. You can set the frontend or backend authentication parameters after enabling custom frontend or backend authentication.</p> <p>The gateway parameters are as follows:</p> <ul style="list-style-type: none"> • \$context.sourcelp: source IP address of the API caller. • \$context.stage: deployment environment in which the API is called. • \$context.apild: API ID. • \$context.appld: ID of the app used by the API caller. • \$context.requestId: request ID generated when the API is called. • \$context.serverAddr: address of the gateway server. • \$context.serverName: name of the gateway server. • \$context.handleTime: time when the API request is processed. • \$context.providerAppId: ID of the app used by the API

Parameter	Mandatory	Type	Description
			<p>owner. This parameter is currently not supported.</p> <p>Frontend authentication parameter: prefixed with "\$context.authorizer.frontend." . For example, to return "aaa" upon successful custom authentication, set this parameter to "\$context.authorizer.frontend.aaa".</p> <p>Backend authentication parameter: prefixed with "\$context.authorizer.backend." . For example, to return "aaa" upon successful custom authentication, set this parameter to "\$context.authorizer.backend.aaa".</p>

Table 3-193 ApiConditionBase

Parameter	Mandatory	Type	Description
req_param_name	No	String	Input parameter name. This parameter is required if the policy type is param.
condition_type	No	String	<p>Policy condition.</p> <ul style="list-style-type: none"> exact: Exact match enum: Enumeration pattern: Regular expression <p>This parameter is required when the policy type is param.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> exact enum pattern

Parameter	Mandatory	Type	Description
condition_origin	Yes	String	Policy type <ul style="list-style-type: none"> param: parameter source: source IP address Enumeration values: <ul style="list-style-type: none"> param source
condition_value	Yes	String	Condition value.

Table 3-194 ApiBackendVpcReq

Parameter	Mandatory	Type	Description
vpc_channel_proxy_host	No	String	Proxy host.
vpc_channel_id	Yes	String	VPC channel ID.

Response Parameters

Status code: 200

Table 3-195 Response body parameters

Parameter	Type	Description
name	String	API name. It can contain 3 to 255 characters, starting with a letter or digit. Only letters, digits, and these special characters are allowed: -_./:()
type	Integer	API type. <ul style="list-style-type: none"> 1: public API 2: private API Enumeration values: <ul style="list-style-type: none"> 1 2
version	String	API version. Maximum: 16

Parameter	Type	Description
req_protocol	String	<p>API request protocol:</p> <ul style="list-style-type: none"> • HTTP • HTTPS • BOTH: Both HTTP and HTTPS are supported. <p>Default: HTTPS</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • HTTP • HTTPS • BOTH
req_method	String	<p>API request method.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • GET • POST • PUT • DELETE • HEAD • PATCH • OPTIONS • ANY
req_uri	String	<p>Request address, which can contain request parameters enclosed with braces ({}). For example, /getUserInfo/{userId}. Special characters, such as asterisks (*), slashes (/), percent signs (%), hyphens (-), underscores (_), and periods (.), are allowed. It can contain a maximum of 512 characters and must comply with URI specifications.</p> <p>NOTE The address must comply with the URI specifications.</p>
auth_type	String	<p>API authentication mode.</p> <ul style="list-style-type: none"> • NONE • APP • IAM • AUTHORIZER <p>Enumeration values:</p> <ul style="list-style-type: none"> • NONE • APP • IAM • AUTHORIZER

Parameter	Type	Description
auth_opt	AuthOpt object	Security authentication parameter.
cors	Boolean	Indicates whether CORS is supported. <ul style="list-style-type: none"> • TRUE: supported • FALSE: not supported Default: false Enumeration values: <ul style="list-style-type: none"> • true • false
match_mode	String	API matching mode: <ul style="list-style-type: none"> • SWA: Prefix match • NORMAL: Exact match Default value: NORMAL Enumeration values: <ul style="list-style-type: none"> • SWA • NORMAL
backend_type	String	Backend type. Options: <ul style="list-style-type: none"> • HTTP: web backend • FUNCTION: FunctionGraph backend. When backend_type is set to FUNCTION, the func_info field is mandatory. • MOCK: mock backend. When backend_type is set to MOCK, the mock_info field is mandatory. Enumeration values: <ul style="list-style-type: none"> • HTTP • FUNCTION • MOCK
remark	String	API description. It cannot exceed 255 characters.
group_id	String	ID of the API group to which the API belongs.
body_remark	String	API request body, which can be an example request body, media type, or parameters. Ensure that the request body does not exceed 20,480 characters.
result_normal_sample	String	Example response for a successful request. Ensure that the response does not exceed 20,480 characters.

Parameter	Type	Description
result_failure_sample	String	Example response for a failed request. Ensure that the response does not exceed 20,480 characters.
authorizer_id	String	ID of the frontend custom authorizer.
tags	Array of strings	<p>Tag.</p> <p>Use letters, digits, and special characters (-*#%.:_) and start with a letter.</p> <p>By default, 10 tags are supported. To increase the quota, contact technical support to modify the API_TAG_NUM_LIMIT configuration.</p> <p>Minimum: 1</p> <p>Maximum: 128</p>
response_id	String	Group response ID.
roma_app_id	String	Integration application ID. Currently, this parameter is not supported.
domain_name	String	Custom domain name bound to the API. Currently, this parameter is not supported.
tag	String	<p>Tag.</p> <p>This field will be deprecated. You can use the tags field instead.</p>
content_type	String	<p>Request content type:</p> <ul style="list-style-type: none"> • application/json • application/xml • multipart/form-data • text/plain <p>Coming soon.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • application/json • application/xml • multipart/form-data • text/plain
id	String	API ID.
status	Integer	<p>App status.</p> <ul style="list-style-type: none"> • 1: valid
arrange_necessary	Integer	Indicates whether to enable orchestration.
register_time	String	Time when the API is registered.

Parameter	Type	Description
update_time	String	Time when the API was last modified.
group_name	String	Name of the API group to which the API belongs.
group_version	String	Version of the API group to which the API belongs. The default value is V1. Other versions are not supported. Default: V1
run_env_id	String	ID of the environment in which the API has been published. Separate multiple environment IDs with vertical bars ().
run_env_name	String	Name of the environment in which the API has been published. Separate multiple environment names with vertical bars ().
publish_id	String	Publication record ID. Separate multiple publication record IDs with vertical bars ().
publish_time	String	Publication time. Separate the time of multiple publication records with vertical bars ().
roma_app_name	String	Name of the integration application to which the API belongs. Currently, this parameter is not supported.
ld_api_id	String	ID of the corresponding custom backend API. Currently, this parameter is not supported.
backend_api	BackendApi object	Web backend details.
api_group_info	ApiGroupCommonInfo object	API group information.
func_info	ApiFunc object	FunctionGraph backend details.
mock_info	ApiMock object	Mock backend details.
req_params	Array of ReqParam objects	Request parameters.

Parameter	Type	Description
backend_params	Array of BackendParam objects	Backend parameters.
policy_functions	Array of ApiPolicyFunctionResp objects	FunctionGraph backend policies.
policy_mock	Array of ApiPolicyMockResp objects	Mock backend policies.
policy_https	Array of ApiPolicyHttpResp objects	Web backend policies.

Table 3-196 AuthOpt

Parameter	Type	Description
app_code_auth_type	String	<p>Indicates whether AppCode authentication is enabled. This parameter is valid only if auth_type is set to App. The default value is DISABLE.</p> <ul style="list-style-type: none"> DISABLE: AppCode authentication is disabled. HEADER: AppCode authentication is enabled and the AppCode is located in the header. <p>Default: DISABLE</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> DISABLE HEADER

Table 3-197 BackendApi

Parameter	Type	Description
authorizer_id	String	Backend custom authorizer ID.

Parameter	Type	Description
url_domain	String	Backend service address. A backend service address consists of a domain name or IP address and a port number, with not more than 255 characters. It must be in the format "Host name:Port number", for example, apig.example.com:7443. If the port number is not specified, the default HTTPS port 443 or the default HTTP port 80 is used. Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.
req_protocol	String	Request protocol. Enumeration values: <ul style="list-style-type: none"> • HTTP • HTTPS
remark	String	Description. It cannot exceed 255 characters.
req_method	String	Request method. Enumeration values: <ul style="list-style-type: none"> • GET • POST • PUT • DELETE • HEAD • PATCH • OPTIONS • ANY
version	String	Web backend version, which can contain a maximum of 16 characters.

Parameter	Type	Description
req_uri	String	Request address, which can contain request parameters enclosed with braces ({}). For example, /getUserInfo/{userId}. Special characters, such as asterisks (*), slashes (/), percent signs (%), hyphens (-), underscores (_), and periods (.), are allowed. It can contain a maximum of 512 characters and must comply with URI specifications. Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed. NOTE The address must comply with the URI specifications.
timeout	Integer	Timeout allowed for APIG to request the backend service. You can set the maximum timeout using the backend_timeout configuration item. The maximum value is 600,000. Unit: ms. Minimum: 1
enable_client_ssl	Boolean	Indicates whether to enable two-way authentication.
retry_count	String	Number of retry attempts to request the backend service. The default value is -1. The value ranges from -1 to 10. -1 indicates that idempotent APIs will retry once and non-idempotent APIs will not retry. POST and PATCH are non-idempotent. GET, HEAD, PUT, OPTIONS, and DELETE are idempotent. Default: -1
id	String	ID.
status	Integer	Backend service status. <ul style="list-style-type: none">1: valid
register_time	String	Registration time.
update_time	String	Update time.
vpc_channel_info	VpcInfo object	VPC channel details. This parameter is required if vpc_channel_status is set to 1.
vpc_channel_status	Integer	Indicates whether to use a VPC channel. <ul style="list-style-type: none">1: A VPC channel is used.2: No VPC channel is used.

Table 3-198 ApiGroupCommonInfo

Parameter	Type	Description
id	String	ID.
name	String	API group name.
status	Integer	Status. <ul style="list-style-type: none"> 1: valid Enumeration values: <ul style="list-style-type: none"> 1
sl_domain	String	Subdomain name that APIG automatically allocates to the API group.
register_time	String	Creation time.
update_time	String	Last modification time.
on_sell_status	Integer	Indicates whether the API group has been listed on KooGallery. <ul style="list-style-type: none"> 1: listed 2: not listed 3: under review Not supported currently.
url_domains	Array of UrlDomain objects	Independent domain names bound to the API group.

Table 3-199 UrlDomain

Parameter	Type	Description
id	String	Domain ID.
domain	String	Domain name.
cname_status	Integer	CNAME resolution status of the domain name. <ul style="list-style-type: none"> 1: not resolved 2: resolving 3: resolved 4: resolution failed
ssl_id	String	SSL certificate ID.
ssl_name	String	SSL certificate name.

Parameter	Type	Description
min_ssl_version	String	Minimum SSL version. TLS 1.1 and TLS 1.2 are supported. Default: TLSv1.1 Enumeration values: <ul style="list-style-type: none"> • TLSv1.1 • TLSv1.2
verified_client_certificate_enabled	Boolean	Whether to enable client certificate verification. This parameter is available only when a certificate is bound. It is enabled by default if trusted_root_ca exists, and disabled if trusted_root_ca does not exist. Default: false
is_has_trusted_root_ca	Boolean	Whether a trusted root certificate (CA) exists. The value is true if trusted_root_ca exists in the bound certificate. Default: false

Table 3-200 ApiFunc

Parameter	Type	Description
function_urn	String	Function URN.
remark	String	Description. It cannot exceed 255 characters.
invocation_type	String	Invocation mode. <ul style="list-style-type: none"> • async: asynchronous • sync: synchronous Enumeration values: <ul style="list-style-type: none"> • async • sync
network_type	String	Function network architecture. <ul style="list-style-type: none"> • V1: non-VPC • V2: VPC Enumeration values: <ul style="list-style-type: none"> • V1 • V2
version	String	Function version. If both a function alias URN and version are passed, only the alias URN will be used. Maximum: 64

Parameter	Type	Description
alias_urn	String	Function alias URN. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored.
timeout	Integer	Timeout allowed for APIG to request the backend service. If the function network architecture is set to V1, the maximum timeout is 60,000. If the network architecture is set to V2, the maximum timeout is 600,000 and can be modified by using the gateway parameter backend_timeout. Unit: ms. Minimum: 1
authorizer_id	String	Backend custom authorizer ID.
id	String	ID.
register_time	String	Registration time.
status	Integer	Backend service status. <ul style="list-style-type: none"> 1: valid
update_time	String	Update time.

Table 3-201 ApiMock

Parameter	Type	Description
remark	String	Description. It cannot exceed 255 characters.
result_content	String	Response.
version	String	Function version. It cannot exceed 64 characters.
authorizer_id	String	Backend custom authorizer ID.
id	String	ID.
register_time	String	Registration time.
status	Integer	Backend service status. <ul style="list-style-type: none"> 1: valid
update_time	String	Update time.

Table 3-202 ReqParam

Parameter	Type	Description
name	String	Parameter name. The parameter name can contain 1 to 32 characters and must start with a letter. Only letters, digits, hyphens (-), underscores (_), and periods (.) are allowed.
type	String	Parameter type. Enumeration values: <ul style="list-style-type: none"> • STRING • NUMBER
location	String	Parameter location. Enumeration values: <ul style="list-style-type: none"> • PATH • QUERY • HEADER
default_value	String	Default value.
sample_value	String	Example value.
required	Integer	Indicates whether the parameter is required. 1: yes 2: no The value of this parameter is 1 if Location is set to PATH, and 2 if Location is set to another value. Enumeration values: <ul style="list-style-type: none"> • 1 • 2
valid_enable	Integer	Indicates whether validity check is enabled. <ul style="list-style-type: none"> • 1: enabled • 2: disabled Default: 2 Enumeration values: <ul style="list-style-type: none"> • 1 • 2
remark	String	Description. It cannot exceed 255 characters.
enumerations	String	Enumerated value.
min_num	Integer	Minimum value. This parameter is valid when type is set to NUMBER.

Parameter	Type	Description
max_num	Integer	Maximum value. This parameter is valid when type is set to NUMBER.
min_size	Integer	Minimum length. This parameter is valid when type is set to STRING.
max_size	Integer	Maximum length. This parameter is valid when type is set to STRING.
regular	String	Regular expression validation rule. Currently, this parameter is not supported.
json_schema	String	JSON validation rule. Currently, this parameter is not supported.
pass_through	Integer	Indicates whether to transparently transfer the parameter. 1: yes 2: no Enumeration values: <ul style="list-style-type: none"> • 1 • 2
id	String	Parameter ID.

Table 3-203 ApiPolicyFunctionResp

Parameter	Type	Description
function_urn	String	Function URN.
invocation_type	String	Invocation mode. <ul style="list-style-type: none"> • async: asynchronous • sync: synchronous Enumeration values: <ul style="list-style-type: none"> • async • sync
network_type	String	Function network architecture. <ul style="list-style-type: none"> • V1: non-VPC • V2: VPC Enumeration values: <ul style="list-style-type: none"> • V1 • V2

Parameter	Type	Description
version	String	Function version. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored. Maximum: 64
alias_urn	String	Function alias URN. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored.
timeout	Integer	Timeout allowed for APIG to request the backend service. If the function network architecture is set to V1, the maximum timeout is 60,000. If the network architecture is set to V2, the maximum timeout is 600,000 and can be modified by using the gateway parameter <code>backend_timeout</code> . Unit: ms. Minimum: 1
id	String	ID.
effect_mode	String	Effective mode of the backend policy. <ul style="list-style-type: none"> • ALL: All conditions are met. • ANY: Any condition is met. Enumeration values: <ul style="list-style-type: none"> • ALL • ANY
name	String	Backend name, which must start with a letter and can contain letters, digits, and underscores (_). Minimum: 3 Maximum: 64
backend_parameters	Array of BackendParameter objects	Backend parameters.
conditions	Array of ConditionResponse objects	Policy conditions.
authorizer_id	String	Backend custom authorizer ID.

Table 3-204 ApiPolicyMockResp

Parameter	Type	Description
id	String	ID.
effect_mode	String	Effective mode of the backend policy. <ul style="list-style-type: none"> • ALL: All conditions are met. • ANY: Any condition is met. Enumeration values: <ul style="list-style-type: none"> • ALL • ANY
name	String	Backend name, which must start with a letter and can contain letters, digits, and underscores (_). Minimum: 3 Maximum: 64
backend_params	Array of BackendParam objects	Backend parameters.
conditions	Array of ConditionResp objects	Policy conditions.
authorizer_id	String	Backend custom authorizer ID.
result_content	String	Response.

Table 3-205 ApiPolicyHttpResp

Parameter	Type	Description
id	String	ID.
effect_mode	String	Effective mode of the backend policy. <ul style="list-style-type: none"> • ALL: All conditions are met. • ANY: Any condition is met. Enumeration values: <ul style="list-style-type: none"> • ALL • ANY
name	String	Backend name, which must start with a letter and can contain letters, digits, and underscores (_). Minimum: 3 Maximum: 64

Parameter	Type	Description
backend_params	Array of BackendParam objects	Backend parameters.
conditions	Array of ConditionResp objects	Policy conditions.
authorizer_id	String	Backend custom authorizer ID.
url_domain	String	<p>Endpoint of the policy backend.</p> <p>An endpoint consists of a domain name or IP address and a port number, with not more than 255 characters. It must be in the format "Domain name:Port number", for example, apig.example.com:7443. If the port number is not specified, the default HTTPS port 443 or the default HTTP port 80 is used.</p> <p>Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.</p>
req_protocol	String	<p>Request protocol. Options include HTTP, HTTPS.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> ● HTTP ● HTTPS
req_method	String	<p>Request method. Options include GET, POST, PUT, DELETE, HEAD, PATCH, OPTIONS, and ANY.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> ● GET ● POST ● PUT ● DELETE ● HEAD ● PATCH ● OPTIONS ● ANY

Parameter	Type	Description
req_uri	String	<p>Request address, which can contain request parameters enclosed with braces ({}). For example, /getUserInfo/{userId}. Special characters, such as asterisks (*), slashes (/), percent signs (%), hyphens (-), underscores (_), and periods (.), are allowed. It can contain a maximum of 512 characters and must comply with URI specifications.</p> <p>Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.</p> <p>NOTE The address must comply with the URI specifications.</p>
timeout	Integer	<p>Timeout allowed for APIG to request the backend service. You can set the maximum timeout using the backend_timeout configuration item. The maximum value is 600,000.</p> <p>Unit: ms. Minimum: 1</p>
retry_count	String	<p>Number of retry attempts to request the backend service. The default value is -1. The value ranges from -1 to 10.</p> <p>-1 indicates that idempotent APIs will retry once and non-idempotent APIs will not retry. POST and PATCH are non-idempotent. GET, HEAD, PUT, OPTIONS, and DELETE are idempotent.</p> <p>Default: -1</p>
vpc_channel_info	VpcInfo object	VPC channel details. This parameter is required if vpc_channel_status is set to 1.
vpc_channel_status	Integer	<p>Indicates whether to use a VPC channel.</p> <ul style="list-style-type: none"> ● 1: A VPC channel is used. ● 2: No VPC channel is used.

Table 3-206 BackendParam

Parameter	Type	Description
origin	String	<p>Parameter type.</p> <ul style="list-style-type: none"> ● REQUEST: backend parameter ● CONSTANT: constant parameter ● SYSTEM: system parameter <p>Enumeration values:</p> <ul style="list-style-type: none"> ● REQUEST ● CONSTANT ● SYSTEM
name	String	<p>Parameter name.</p> <p>The parameter name must start with a letter and can only contain letters, digits, hyphens (-), underscores (_), and periods (.).</p> <p>Minimum: 1</p> <p>Maximum: 32</p>
remark	String	<p>Description, which can contain a maximum of 255 characters.</p>
location	String	<p>Parameter location. The value can be PATH, QUERY, or HEADER.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> ● PATH ● QUERY ● HEADER

Parameter	Type	Description
value	String	<p>Parameter value, which can contain a maximum of 255 characters.</p> <p>If the origin type is REQUEST, the value of this parameter is the parameter name in req_params.</p> <p>If the origin type is CONSTANT, the value is a constant.</p> <p>If the origin type is SYSTEM, the value is a system parameter name. System parameters include gateway parameters, frontend authentication parameters, and backend authentication parameters. You can set the frontend or backend authentication parameters after enabling custom frontend or backend authentication.</p> <p>The gateway parameters are as follows:</p> <ul style="list-style-type: none"> • \$context.sourceIp: source IP address of the API caller. • \$context.stage: deployment environment in which the API is called. • \$context.apid: API ID. • \$context.appid: ID of the app used by the API caller. • \$context.requestId: request ID generated when the API is called. • \$context.serverAddr: address of the gateway server. • \$context.serverName: name of the gateway server. • \$context.handleTime: time when the API request is processed. • \$context.providerAppId: ID of the app used by the API owner. This parameter is currently not supported. <p>Frontend authentication parameter: prefixed with "\$context.authorizer.frontend.". For example, to return "aaa" upon successful custom authentication, set this parameter to "\$context.authorizer.frontend.aaa".</p> <p>Backend authentication parameter: prefixed with "\$context.authorizer.backend.". For example, to return "aaa" upon successful custom authentication, set this parameter to "\$context.authorizer.backend.aaa".</p>
id	String	Parameter ID.

Parameter	Type	Description
req_param_id	String	Request parameter ID.

Table 3-207 ConditionResp

Parameter	Type	Description
req_param_name	String	Input parameter name. This parameter is required if the policy type is param.
condition_type	String	Policy condition. <ul style="list-style-type: none"> exact: Exact match enum: Enumeration pattern: Regular expression This parameter is required when the policy type is param. Enumeration values: <ul style="list-style-type: none"> exact enum pattern
condition_origin	String	Policy type <ul style="list-style-type: none"> param: parameter source: source IP address Enumeration values: <ul style="list-style-type: none"> param source
condition_value	String	Policy value. This parameter is required when the policy type is param.
id	String	ID.
req_param_id	String	Input parameter ID.
req_param_location	String	Input parameter location.

Table 3-208 VpcInfo

Parameter	Type	Description
ecs_id	String	Cloud server ID.
ecs_name	String	Cloud server name.

Parameter	Type	Description
cascade_flag	Boolean	Indicates whether to use the cascading mode. Currently, this parameter is not supported.
vpc_channel_proxy_host	String	Proxy host.
vpc_channel_id	String	VPC channel ID.
vpc_channel_port	Integer	VPC channel port.

Status code: 400

Table 3-209 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-210 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-211 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-212 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-213 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Modifying an API (authentication mode: app; backend: VPC channel)

```
{
  "group_id" : "c77f5e81d9cb4424bf704ef2b0ac7600",
  "match_mode" : "NORMAL",
  "name" : "Api_http",
  "auth_type" : "APP",
  "backend_type" : "HTTP",
  "backend_api" : {
    "vpc_channel_status" : 1,
    "vpc_channel_info" : {
      "vpc_channel_id" : "56a7d7358e1b42459c9d730d65b14e59",
      "vpc_channel_proxy_host" : "www.example.com"
    }
  },
  "req_protocol" : "HTTPS",
  "req_method" : "GET",
  "req_uri" : "/test/benchmark",
  "timeout" : 5000,
  "retry_count" : "-1"
},
{
  "cors" : false,
  "req_protocol" : "HTTPS",
  "req_uri" : "/test/http",
  "remark" : "Web backend API",
  "type" : 1,
  "req_method" : "GET",
  "result_normal_sample" : "Example success response",
  "result_failure_sample" : "Example failure response",
  "backend_params" : [ {
    "name" : "X-CONSTANT-HEADER",
    "value" : "demo",
    "location" : "HEADER",
    "origin" : "CONSTANT",
    "remark" : "constant_demo"
  } ], {
    "name" : "app-id",
    "value" : "$context.appld",
    "location" : "HEADER",
    "origin" : "SYSTEM",
    "remark" : "App ID of the API caller"
  }
}
```

```
    }],  
    "tags" : [ "webApi" ]  
  }  
}
```

Example Responses

Status code: 200

OK

```
{  
  "id" : "5f918d104dc84480a75166ba99efff21",  
  "tags" : [ "webApi" ],  
  "arrange_necessary" : 2,  
  "backend_type" : "HTTP",  
  "auth_type" : "APP",  
  "auth_opt" : {  
    "app_code_auth_type" : "DISABLE"  
  },  
  "backend_api" : {  
    "update_time" : "2020-08-02T16:32:47.077028841Z",  
    "vpc_channel_status" : 1,  
    "vpc_channel_info" : {  
      "vpc_channel_id" : "56a7d7358e1b42459c9d730d65b14e59",  
      "vpc_channel_proxy_host" : "www.example.com"  
    },  
    "url_domain" : "56a7d7358e1b42459c9d730d65b14e59",  
    "req_protocol" : "HTTPS",  
    "id" : "1ce8fda3586d4371bd83c955df37e102",  
    "req_method" : "GET",  
    "register_time" : "2020-07-31T12:42:51Z",  
    "req_uri" : "/test/benchmark",  
    "timeout" : 5000,  
    "status" : 1,  
    "retry_count" : "-1"  
  },  
  "cors" : false,  
  "status" : 1,  
  "group_name" : "api_group_001",  
  "group_id" : "c77f5e81d9cb4424bf704ef2b0ac7600",  
  "group_version" : "V1",  
  "match_mode" : "NORMAL",  
  "name" : "Api_http",  
  "req_protocol" : "HTTPS",  
  "req_method" : "GET",  
  "req_uri" : "/test/http",  
  "type" : 1,  
  "version" : "V0.0.1",  
  "result_normal_sample" : "Example success response",  
  "result_failure_sample" : "Example failure response",  
  "register_time" : "2020-07-31T12:42:51Z",  
  "update_time" : "2020-08-02T16:32:47.046288842Z",  
  "remark" : "Web backend API",  
  "backend_params" : [ {  
    "name" : "X-CONSTANT-HEADER",  
    "value" : "demo",  
    "location" : "HEADER",  
    "origin" : "CONSTANT",  
    "remark" : "constant_demo",  
    "id" : "8cb2eba19e7a4423a4e835647a8b8d76"  
  } ],  
  {  
    "name" : "app-id",  
    "value" : "$context.appld",  
    "location" : "HEADER",  
    "origin" : "SYSTEM",  
    "remark" : "App ID of the API caller",  
    "id" : "216ddd836e74d528f364ff589d9dd21"  
  }  
}
```

Status code: 400

Bad Request

```
{  
  "error_code" : "APIG.2011",  
  "error_msg" : "Invalid parameter value,parameterName:name. Please refer to the support documentation"  
}
```

Status code: 401

Unauthorized

```
{  
  "error_code" : "APIG.1002",  
  "error_msg" : "Incorrect token or token resolution failed"  
}
```

Status code: 403

Forbidden

```
{  
  "error_code" : "APIG.1005",  
  "error_msg" : "No permissions to request this method"  
}
```

Status code: 404

Not Found

```
{  
  "error_code" : "APIG.3002",  
  "error_msg" : "API 5f918d104dc84480a75166ba99efff21 does not exist"  
}
```

Status code: 500

Internal Server Error

```
{  
  "error_code" : "APIG.9999",  
  "error_msg" : "System error"  
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.5.3 Deleting an API

Function

This API is used to delete an API.

This operation will delete all related resources and binding relationships of the API, such as publication records, backend services, and app authorization information.

Calling Method

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

URI

DELETE /v2/{project_id}/apigw/instances/{instance_id}/apis/{api_id}

Table 3-214 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
api_id	Yes	String	API ID.

Request Parameters

Table 3-215 Request header parameters

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

Response Parameters

Status code: 401

Table 3-216 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-217 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-218 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 409

Table 3-219 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500

Table 3-220 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3002",
  "error_msg" : "API 5f918d104dc84480a75166ba99efff21 does not exist"
}
```

Status code: 409

Conflict

```
{
  "error_code" : "APIG.3416",
  "error_msg" : "The API cannot be deleted because it has been published"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
204	No Content
401	Unauthorized
403	Forbidden
404	Not Found
409	Conflict
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.5.4 Publishing an API or Taking an API Offline

Function

This API is used to publish an API or take an API offline.

An API can be called only in an environment where the API has been published. APIs that have not been published cannot be called.

You can remove an API from an environment in which it has been published. After this operation, the API can no longer be called in the environment.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances/{instance_id}/apis/action

Table 3-221 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-222 Request header parameters

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

Table 3-223 Request body parameters

Parameter	Mandatory	Type	Description
action	Yes	String	Operation to perform. <ul style="list-style-type: none"> online: publish APIs offline: take APIs offline Enumeration values: <ul style="list-style-type: none"> online offline
env_id	Yes	String	ID of the environment in which the API will be published.
api_id	Yes	String	ID of the API to be published or taken offline.
remark	No	String	Description about the publishing. It cannot exceed 255 characters.

Response Parameters

Status code: 201

Table 3-224 Response body parameters

Parameter	Type	Description
publish_id	String	Publication record ID.
api_id	String	API ID.
api_name	String	API name.

Parameter	Type	Description
env_id	String	ID of the environment in which the API has been published.
remark	String	Description about the publication.
publish_time	String	Publication time.
version_id	String	API version currently in use.

Status code: 400

Table 3-225 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-226 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-227 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-228 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-229 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Publishing an API in an environment

```
{
  "action": "online",
  "api_id": "5f918d104dc84480a75166ba99efff21",
  "env_id": "DEFAULT_ENVIRONMENT_RELEASE_ID"
}
```

Example Responses

Status code: 201

Created

```
{
  "api_id": "5f918d104dc84480a75166ba99efff21",
  "env_id": "DEFAULT_ENVIRONMENT_RELEASE_ID",
  "publish_id": "9191cdb430724d4b8586ed7f1b962ca2",
  "publish_time": "2020-08-03T01:36:00.592970615Z",
  "version_id": "ee1a5a38d3d3493abf1dc4ed6cacfa0b"
}
```

Status code: 400

Bad Request

```
{
  "error_code": "APIG.2011",
  "error_msg": "Invalid parameter value,parameterName:action. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code": "APIG.1002",
  "error_msg": "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3002",
  "error_msg" : "API 5f918d104dc84480a75166ba99efff21 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
201	Created
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.5.5 Querying API Details

Function

This API is used to query the details of an API.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/apis/{api_id}

Table 3-230 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
api_id	Yes	String	API ID.

Request Parameters

Table 3-231 Request header parameters

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

Response Parameters

Status code: 200

Table 3-232 Response body parameters

Parameter	Type	Description
name	String	API name. It can contain 3 to 255 characters, starting with a letter or digit. Only letters, digits, and these special characters are allowed: -_./:()

Parameter	Type	Description
type	Integer	API type. <ul style="list-style-type: none"> • 1: public API • 2: private API Enumeration values: <ul style="list-style-type: none"> • 1 • 2
version	String	API version. Maximum: 16
req_protocol	String	API request protocol: <ul style="list-style-type: none"> • HTTP • HTTPS • BOTH: Both HTTP and HTTPS are supported. Default: HTTPS Enumeration values: <ul style="list-style-type: none"> • HTTP • HTTPS • BOTH
req_method	String	API request method. Enumeration values: <ul style="list-style-type: none"> • GET • POST • PUT • DELETE • HEAD • PATCH • OPTIONS • ANY
req_uri	String	Request address, which can contain request parameters enclosed with braces ({}). For example, /getUserInfo/{userId}. Special characters, such as asterisks (*), slashes (/), percent signs (%), hyphens (-), underscores (_), and periods (.), are allowed. It can contain a maximum of 512 characters and must comply with URI specifications. NOTE The address must comply with the URI specifications.

Parameter	Type	Description
auth_type	String	API authentication mode. <ul style="list-style-type: none"> • NONE • APP • IAM • AUTHORIZER Enumeration values: <ul style="list-style-type: none"> • NONE • APP • IAM • AUTHORIZER
auth_opt	AuthOpt object	Security authentication parameter.
cors	Boolean	Indicates whether CORS is supported. <ul style="list-style-type: none"> • TRUE: supported • FALSE: not supported Default: false Enumeration values: <ul style="list-style-type: none"> • true • false
match_mode	String	API matching mode: <ul style="list-style-type: none"> • SWA: Prefix match • NORMAL: Exact match Default value: NORMAL Enumeration values: <ul style="list-style-type: none"> • SWA • NORMAL
backend_type	String	Backend type. <ul style="list-style-type: none"> • HTTP: web backend • FUNCTION: FunctionGraph backend. When backend_type is set to FUNCTION, the func_info field is mandatory. • MOCK: mock backend. When backend_type is set to MOCK, the mock_info field is mandatory. Enumeration values: <ul style="list-style-type: none"> • HTTP • FUNCTION • MOCK

Parameter	Type	Description
remark	String	API description. It cannot exceed 255 characters.
group_id	String	ID of the API group to which the API belongs.
body_remark	String	API request body, which can be an example request body, media type, or parameters. Ensure that the request body does not exceed 20,480 characters.
result_normal_sample	String	Example response for a successful request. Ensure that the response does not exceed 20,480 characters.
result_failure_sample	String	Example response for a failed request. Ensure that the response does not exceed 20,480 characters.
authorizer_id	String	ID of the frontend custom authorizer.
tags	Array of strings	Tag. Use letters, digits, and special characters (-*#%.:_) and start with a letter. By default, 10 tags are supported. To increase the quota, contact technical support to modify the API_TAG_NUM_LIMIT configuration. Minimum: 1 Maximum: 128
response_id	String	Group response ID.
roma_app_id	String	Integration application ID. Currently, this parameter is not supported.
domain_name	String	Custom domain name bound to the API. Currently, this parameter is not supported.
tag	String	Tag. This field will be deprecated. You can use the tags field instead.

Parameter	Type	Description
content_type	String	Request content type: <ul style="list-style-type: none"> • application/json • application/xml • multipart/form-data • text/plain Coming soon. Enumeration values: <ul style="list-style-type: none"> • application/json • application/xml • multipart/form-data • text/plain
id	String	API ID.
status	Integer	App status. <ul style="list-style-type: none"> • 1: valid
arrange_necessary	Integer	Indicates whether to enable orchestration.
register_time	String	Time when the API is registered.
update_time	String	Time when the API was last modified.
group_name	String	Name of the API group to which the API belongs.
group_version	String	Version of the API group to which the API belongs. The default value is V1. Other versions are not supported. Default: V1
run_env_id	String	ID of the environment in which the API has been published. Separate multiple environment IDs with vertical bars ().
run_env_name	String	Name of the environment in which the API has been published. Separate multiple environment names with vertical bars ().
publish_id	String	Publication record ID. Separate multiple publication record IDs with vertical bars ().

Parameter	Type	Description
publish_time	String	Publication time. Separate the time of multiple publication records with vertical bars ().
roma_app_name	String	Name of the integration application to which the API belongs. Currently, this parameter is not supported.
ld_api_id	String	ID of the corresponding custom backend API. Currently, this parameter is not supported.
backend_api	BackendApi object	Web backend details.
api_group_info	ApiGroupCommonInfo object	API group information.
func_info	ApiFunc object	FunctionGraph backend details.
mock_info	ApiMock object	Mock backend details.
req_params	Array of ReqParam objects	Request parameters.
backend_params	Array of BackendParam objects	Backend parameters.
policy_functions	Array of ApiPolicyFunctionResp objects	FunctionGraph backend policies.
policy_mocks	Array of ApiPolicyMockResp objects	Mock backend policies.
policy_https	Array of ApiPolicyHttpResp objects	Web backend policies.

Table 3-233 AuthOpt

Parameter	Type	Description
app_code_auth_type	String	<p>Indicates whether AppCode authentication is enabled. This parameter is valid only if auth_type is set to App. The default value is DISABLE.</p> <ul style="list-style-type: none"> • DISABLE: AppCode authentication is disabled. • HEADER: AppCode authentication is enabled and the AppCode is located in the header. <p>Default: DISABLE</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • DISABLE • HEADER

Table 3-234 BackendApi

Parameter	Type	Description
authorizer_id	String	Backend custom authorizer ID.
url_domain	String	<p>Backend service address.</p> <p>A backend service address consists of a domain name or IP address and a port number, with not more than 255 characters. It must be in the format "Host name:Port number", for example, apig.example.com:7443. If the port number is not specified, the default HTTPS port 443 or the default HTTP port 80 is used.</p> <p>Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.</p>
req_protocol	String	<p>Request protocol.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • HTTP • HTTPS
remark	String	Description. It cannot exceed 255 characters.

Parameter	Type	Description
req_method	String	Request method. Enumeration values: <ul style="list-style-type: none"> • GET • POST • PUT • DELETE • HEAD • PATCH • OPTIONS • ANY
version	String	Web backend version, which can contain a maximum of 16 characters.
req_uri	String	Request address, which can contain request parameters enclosed with braces ({}). For example, /getUserInfo/{userId}. Special characters, such as asterisks (*), slashes (/), percent signs (%), hyphens (-), underscores (_), and periods (.), are allowed. It can contain a maximum of 512 characters and must comply with URI specifications. Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed. NOTE The address must comply with the URI specifications.
timeout	Integer	Timeout allowed for APIG to request the backend service. You can set the maximum timeout using the backend_timeout configuration item. The maximum value is 600,000. Unit: ms. Minimum: 1
enable_client_ssl	Boolean	Indicates whether to enable two-way authentication.

Parameter	Type	Description
retry_count	String	Number of retry attempts to request the backend service. The default value is -1. The value ranges from -1 to 10. -1 indicates that idempotent APIs will retry once and non-idempotent APIs will not retry. POST and PATCH are non-idempotent. GET, HEAD, PUT, OPTIONS, and DELETE are idempotent. Default: -1
id	String	ID.
status	Integer	Backend service status. <ul style="list-style-type: none"> 1: valid
register_time	String	Registration time.
update_time	String	Update time.
vpc_channel_info	VpcInfo object	VPC channel details. This parameter is required if vpc_channel_status is set to 1.
vpc_channel_status	Integer	Indicates whether to use a VPC channel. <ul style="list-style-type: none"> 1: A VPC channel is used. 2: No VPC channel is used.

Table 3-235 ApiGroupCommonInfo

Parameter	Type	Description
id	String	ID.
name	String	API group name.
status	Integer	Status. <ul style="list-style-type: none"> 1: valid Enumeration values: <ul style="list-style-type: none"> 1
sl_domain	String	Subdomain name that APIG automatically allocates to the API group.
register_time	String	Creation time.
update_time	String	Last modification time.

Parameter	Type	Description
on_sell_status	Integer	Indicates whether the API group has been listed on KooGallery. <ul style="list-style-type: none"> • 1: listed • 2: not listed • 3: under review Not supported currently.
url_domains	Array of UrlDomain objects	Independent domain names bound to the API group.

Table 3-236 UrlDomain

Parameter	Type	Description
id	String	Domain ID.
domain	String	Domain name.
cname_status	Integer	CNAME resolution status of the domain name. <ul style="list-style-type: none"> • 1: not resolved • 2: resolving • 3: resolved • 4: resolution failed
ssl_id	String	SSL certificate ID.
ssl_name	String	SSL certificate name.
min_ssl_version	String	Minimum SSL version. TLS 1.1 and TLS 1.2 are supported. Default: TLSv1.1 Enumeration values: <ul style="list-style-type: none"> • TLSv1.1 • TLSv1.2
verified_client_certificate_enabled	Boolean	Whether to enable client certificate verification. This parameter is available only when a certificate is bound. It is enabled by default if trusted_root_ca exists, and disabled if trusted_root_ca does not exist. Default: false
is_has_trusted_root_ca	Boolean	Whether a trusted root certificate (CA) exists. The value is true if trusted_root_ca exists in the bound certificate. Default: false

Table 3-237 ApiFunc

Parameter	Type	Description
function_urn	String	Function URN.
remark	String	Description. It cannot exceed 255 characters.
invocation_type	String	Invocation mode. <ul style="list-style-type: none"> • async: asynchronous • sync: synchronous Enumeration values: <ul style="list-style-type: none"> • async • sync
network_type	String	Function network architecture. <ul style="list-style-type: none"> • V1: non-VPC • V2: VPC Enumeration values: <ul style="list-style-type: none"> • V1 • V2
version	String	Function version. If both a function alias URN and version are passed, only the alias URN will be used. Maximum: 64
alias_urn	String	Function alias URN. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored.
timeout	Integer	Timeout allowed for APIG to request the backend service. If the function network architecture is set to V1, the maximum timeout is 60,000. If the network architecture is set to V2, the maximum timeout is 600,000 and can be modified by using the gateway parameter backend_timeout. Unit: ms. Minimum: 1
authorizer_id	String	Backend custom authorizer ID.
id	String	ID.
register_time	String	Registration time.
status	Integer	Backend service status. <ul style="list-style-type: none"> • 1: valid

Parameter	Type	Description
update_time	String	Update time.

Table 3-238 ApiMock

Parameter	Type	Description
remark	String	Description. It cannot exceed 255 characters.
result_content	String	Response.
version	String	Function version. It cannot exceed 64 characters.
authorizer_id	String	Backend custom authorizer ID.
id	String	ID.
register_time	String	Registration time.
status	Integer	Backend service status. <ul style="list-style-type: none"> • 1: valid
update_time	String	Update time.

Table 3-239 ReqParam

Parameter	Type	Description
name	String	Parameter name. The parameter name can contain 1 to 32 characters and must start with a letter. Only letters, digits, hyphens (-), underscores (_), and periods (.) are allowed.
type	String	Parameter type. Enumeration values: <ul style="list-style-type: none"> • STRING • NUMBER
location	String	Parameter location. Enumeration values: <ul style="list-style-type: none"> • PATH • QUERY • HEADER
default_value	String	Default value.
sample_value	String	Example value.

Parameter	Type	Description
required	Integer	Indicates whether the parameter is required. 1: yes 2: no The value of this parameter is 1 if Location is set to PATH, and 2 if Location is set to another value. Enumeration values: <ul style="list-style-type: none"> • 1 • 2
valid_enable	Integer	Indicates whether validity check is enabled. <ul style="list-style-type: none"> • 1: enabled • 2: disabled Default: 2 Enumeration values: <ul style="list-style-type: none"> • 1 • 2
remark	String	Description. It cannot exceed 255 characters.
enumerations	String	Enumerated value.
min_num	Integer	Minimum value. This parameter is valid when type is set to NUMBER.
max_num	Integer	Maximum value. This parameter is valid when type is set to NUMBER.
min_size	Integer	Minimum length. This parameter is valid when type is set to STRING.
max_size	Integer	Maximum length. This parameter is valid when type is set to STRING.
regular	String	Regular expression validation rule. Currently, this parameter is not supported.
json_schema	String	JSON validation rule. Currently, this parameter is not supported.

Parameter	Type	Description
pass_through	Integer	Indicates whether to transparently transfer the parameter. 1: yes 2: no Enumeration values: <ul style="list-style-type: none"> • 1 • 2
id	String	Parameter ID.

Table 3-240 ApiPolicyFunctionResp

Parameter	Type	Description
function_urn	String	Function URN.
invocation_type	String	Invocation mode. <ul style="list-style-type: none"> • async: asynchronous • sync: synchronous Enumeration values: <ul style="list-style-type: none"> • async • sync
network_type	String	Function network architecture. <ul style="list-style-type: none"> • V1: non-VPC • V2: VPC Enumeration values: <ul style="list-style-type: none"> • V1 • V2
version	String	Function version. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored. Maximum: 64
alias_urn	String	Function alias URN. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored.

Parameter	Type	Description
timeout	Integer	Timeout allowed for APIG to request the backend service. If the function network architecture is set to V1, the maximum timeout is 60,000. If the network architecture is set to V2, the maximum timeout is 600,000 and can be modified by using the gateway parameter <code>backend_timeout</code> . Unit: ms. Minimum: 1
id	String	ID.
effect_mode	String	Effective mode of the backend policy. <ul style="list-style-type: none"> • ALL: All conditions are met. • ANY: Any condition is met. Enumeration values: <ul style="list-style-type: none"> • ALL • ANY
name	String	Backend name, which must start with a letter and can contain letters, digits, and underscores (_). Minimum: 3 Maximum: 64
backend_params	Array of BackendParam objects	Backend parameters.
conditions	Array of ConditionResp objects	Policy conditions.
authorizer_id	String	Backend custom authorizer ID.

Table 3-241 ApiPolicyMockResp

Parameter	Type	Description
id	String	ID.
effect_mode	String	Effective mode of the backend policy. <ul style="list-style-type: none"> • ALL: All conditions are met. • ANY: Any condition is met. Enumeration values: <ul style="list-style-type: none"> • ALL • ANY

Parameter	Type	Description
name	String	Backend name, which must start with a letter and can contain letters, digits, and underscores (_). Minimum: 3 Maximum: 64
backend_params	Array of BackendParam objects	Backend parameters.
conditions	Array of ConditionResp objects	Policy conditions.
authorizer_id	String	Backend custom authorizer ID.
result_content	String	Response.

Table 3-242 ApiPolicyHttpResp

Parameter	Type	Description
id	String	ID.
effect_mode	String	Effective mode of the backend policy. <ul style="list-style-type: none"> • ALL: All conditions are met. • ANY: Any condition is met. Enumeration values: <ul style="list-style-type: none"> • ALL • ANY
name	String	Backend name, which must start with a letter and can contain letters, digits, and underscores (_). Minimum: 3 Maximum: 64
backend_params	Array of BackendParam objects	Backend parameters.
conditions	Array of ConditionResp objects	Policy conditions.
authorizer_id	String	Backend custom authorizer ID.

Parameter	Type	Description
url_domain	String	<p>Endpoint of the policy backend.</p> <p>An endpoint consists of a domain name or IP address and a port number, with not more than 255 characters. It must be in the format "Domain name:Port number", for example, apig.example.com:7443. If the port number is not specified, the default HTTPS port 443 or the default HTTP port 80 is used.</p> <p>Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.</p>
req_protocol	String	<p>Request protocol. Options include HTTP, HTTPS.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> ● HTTP ● HTTPS
req_method	String	<p>Request method. Options include GET, POST, PUT, DELETE, HEAD, PATCH, OPTIONS, and ANY. Enumeration values:</p> <ul style="list-style-type: none"> ● GET ● POST ● PUT ● DELETE ● HEAD ● PATCH ● OPTIONS ● ANY
req_uri	String	<p>Request address, which can contain request parameters enclosed with braces ({}). For example, /getUserInfo/{userId}. Special characters, such as asterisks (*), slashes (/), percent signs (%), hyphens (-), underscores (_), and periods (.), are allowed. It can contain a maximum of 512 characters and must comply with URI specifications.</p> <p>Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.</p> <p>NOTE The address must comply with the URI specifications.</p>

Parameter	Type	Description
timeout	Integer	Timeout allowed for APIG to request the backend service. You can set the maximum timeout using the backend_timeout configuration item. The maximum value is 600,000. Unit: ms. Minimum: 1
retry_count	String	Number of retry attempts to request the backend service. The default value is -1. The value ranges from -1 to 10. -1 indicates that idempotent APIs will retry once and non-idempotent APIs will not retry. POST and PATCH are non-idempotent. GET, HEAD, PUT, OPTIONS, and DELETE are idempotent. Default: -1
vpc_channel_info	VpcInfo object	VPC channel details. This parameter is required if vpc_channel_status is set to 1.
vpc_channel_status	Integer	Indicates whether to use a VPC channel. <ul style="list-style-type: none"> • 1: A VPC channel is used. • 2: No VPC channel is used.

Table 3-243 BackendParam

Parameter	Type	Description
origin	String	Parameter type. <ul style="list-style-type: none"> • REQUEST: backend parameter • CONSTANT: constant parameter • SYSTEM: system parameter Enumeration values: <ul style="list-style-type: none"> • REQUEST • CONSTANT • SYSTEM
name	String	Parameter name. The parameter name must start with a letter and can only contain letters, digits, hyphens (-), underscores (_), and periods (.). Minimum: 1 Maximum: 32

Parameter	Type	Description
remark	String	Description, which can contain a maximum of 255 characters.
location	String	Parameter location. The value can be PATH, QUERY, or HEADER. Enumeration values: <ul style="list-style-type: none">● PATH● QUERY● HEADER

Parameter	Type	Description
value	String	<p>Parameter value, which can contain a maximum of 255 characters.</p> <p>If the origin type is REQUEST, the value of this parameter is the parameter name in req_params.</p> <p>If the origin type is CONSTANT, the value is a constant.</p> <p>If the origin type is SYSTEM, the value is a system parameter name. System parameters include gateway parameters, frontend authentication parameters, and backend authentication parameters. You can set the frontend or backend authentication parameters after enabling custom frontend or backend authentication.</p> <p>The gateway parameters are as follows:</p> <ul style="list-style-type: none"> • \$context.sourceIp: source IP address of the API caller. • \$context.stage: deployment environment in which the API is called. • \$context.apid: API ID. • \$context.appid: ID of the app used by the API caller. • \$context.requestId: request ID generated when the API is called. • \$context.serverAddr: address of the gateway server. • \$context.serverName: name of the gateway server. • \$context.handleTime: time when the API request is processed. • \$context.providerAppId: ID of the app used by the API owner. This parameter is currently not supported. <p>Frontend authentication parameter: prefixed with "\$context.authorizer.frontend.". For example, to return "aaa" upon successful custom authentication, set this parameter to "\$context.authorizer.frontend.aaa".</p> <p>Backend authentication parameter: prefixed with "\$context.authorizer.backend.". For example, to return "aaa" upon successful custom authentication, set this parameter to "\$context.authorizer.backend.aaa".</p>
id	String	Parameter ID.

Parameter	Type	Description
req_param_id	String	Request parameter ID.

Table 3-244 ConditionResp

Parameter	Type	Description
req_param_name	String	Input parameter name. This parameter is required if the policy type is param.
condition_type	String	Policy condition. <ul style="list-style-type: none"> exact: Exact match enum: Enumeration pattern: Regular expression This parameter is required when the policy type is param. Enumeration values: <ul style="list-style-type: none"> exact enum pattern
condition_origin	String	Policy type <ul style="list-style-type: none"> param: parameter source: source IP address Enumeration values: <ul style="list-style-type: none"> param source
condition_value	String	Policy value. This parameter is required when the policy type is param, source, cookie, or frontend_authorizer.
id	String	ID.
req_param_id	String	Input parameter ID.
req_param_location	String	Input parameter location.

Table 3-245 VpcInfo

Parameter	Type	Description
ecs_id	String	Cloud server ID.
ecs_name	String	Cloud server name.

Parameter	Type	Description
cascade_flag	Boolean	Indicates whether to use the cascading mode. Currently, this parameter is not supported.
vpc_channel_proxy_host	String	Proxy host.
vpc_channel_id	String	VPC channel ID.
vpc_channel_port	Integer	VPC channel port.

Status code: 401

Table 3-246 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-247 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-248 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-249 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "id": "5f918d104dc84480a75166ba99efff21",
  "tags": [ "webApi" ],
  "arrange_necessary": 2,
  "backend_type": "HTTP",
  "auth_type": "AUTHORIZER",
  "auth_opt": {
    "app_code_auth_type": "DISABLE"
  },
  "authorizer_id": "8d0443832a194eaa84244e0c1c1912ac",
  "backend_api": {
    "update_time": "2020-08-02T16:32:47.077029Z",
    "vpc_channel_status": 1,
    "vpc_channel_info": {
      "vpc_channel_id": "56a7d7358e1b42459c9d730d65b14e59",
      "vpc_channel_proxy_host": "www.example.com"
    },
    "url_domain": "56a7d7358e1b42459c9d730d65b14e59",
    "req_protocol": "HTTPS",
    "id": "1ce8fda3586d4371bd83c955df37e102",
    "req_method": "GET",
    "register_time": "2020-07-31T12:42:51Z",
    "req_uri": "/test/benchmark",
    "timeout": 5000,
    "status": 1,
    "retry_count": "-1"
  },
  "cors": false,
  "status": 1,
  "group_name": "api_group_001",
  "group_id": "c77f5e81d9cb4424bf704ef2b0ac7600",
  "group_version": "V1",
  "match_mode": "NORMAL",
  "name": "Api_http",
  "req_protocol": "HTTPS",
  "req_method": "GET",
  "req_uri": "/test/http",
  "type": 1,
  "version": "V0.0.1",
  "result_normal_sample": "Example success response",
  "result_failure_sample": "Example failure response",
  "register_time": "2020-07-31T12:42:51Z",
  "update_time": "2020-08-02T16:32:47.046289Z",
  "remark": "Web backend API",
  "backend_params": [ {
    "name": "X-CONSTANT-HEADER",
```

```

"value": "demo",
"location": "HEADER",
"origin": "CONSTANT",
"remark": "constant_demo",
"id": "8cb2eba19e7a4423a4e835647a8b8d76"
}, {
"name": "app-id",
"value": "$context.appId",
"location": "HEADER",
"origin": "SYSTEM",
"remark": "App ID of the API caller",
"id": "216ddda836e74d528f364ff589d9dd21"
}]
}

```

Status code: 401

Unauthorized

```

{
"error_code": "APIG.1002",
"error_msg": "Incorrect token or token resolution failed"
}

```

Status code: 403

Forbidden

```

{
"error_code": "APIG.1005",
"error_msg": "No permissions to request this method"
}

```

Status code: 404

Not Found

```

{
"error_code": "APIG.3002",
"error_msg": "API 5f918d104dc84480a75166ba99efff21 does not exist"
}

```

Status code: 500

Internal Server Error

```

{
"error_code": "APIG.9999",
"error_msg": "System error"
}

```

Status Codes

Status Code	Description
200	OK
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.5.6 Querying APIs

Function

This API is used to query APIs to return their details and publication information. Backend and request parameter information of the APIs will not be returned.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/apis

Table 3-250 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-251 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20
id	No	String	API ID.
name	No	String	API name.
group_id	No	String	API group ID.
req_protocol	No	String	Request protocol.
req_method	No	String	Request method.
req_uri	No	String	Request path.
auth_type	No	String	Security authentication mode.
env_id	No	String	ID of the environment in which the API has been published.
type	No	Integer	API type.
precise_search	No	String	Parameter name (name or req_uri) for exact matching.
vpc_channel_name	No	String	Load balance channel name.

Parameter	Mandatory	Type	Description
return_data_mode	No	String	<p>Additional information to be included in the returned API details. Separate multiple parameters with commas (.). "brief" does not take effect when used with any "include" parameters. Currently, only brief, include_group, and include_group_backend are supported.</p> <p>brief: default, indicating that no additional information will be included.</p> <p>include_group: The return result will include api_group_info.</p> <p>include_group_backend: The return result will include backend_api.</p> <p>Default: brief</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • brief • include_group • include_group_backend

Request Parameters

Table 3-252 Request header parameters

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

Response Parameters

Status code: 200

Table 3-253 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.

Parameter	Type	Description
total	Long	Number of resources that match the query conditions.
apis	Array of ApiInfoPerPage objects	API list.

Table 3-254 ApiInfoPerPage

Parameter	Type	Description
name	String	API name. It can contain 3 to 255 characters, starting with a letter or digit. Only letters, digits, and these special characters are allowed: -_./:()
type	Integer	API type. <ul style="list-style-type: none"> • 1: public API • 2: private API Enumeration values: <ul style="list-style-type: none"> • 1 • 2
version	String	API version. Maximum: 16
req_protocol	String	API request protocol: <ul style="list-style-type: none"> • HTTP • HTTPS • BOTH: Both HTTP and HTTPS are supported. Default: HTTPS Enumeration values: <ul style="list-style-type: none"> • HTTP • HTTPS • BOTH

Parameter	Type	Description
req_method	String	API request method. Enumeration values: <ul style="list-style-type: none"> • GET • POST • PUT • DELETE • HEAD • PATCH • OPTIONS • ANY
req_uri	String	Request address, which can contain request parameters enclosed with braces ({}). For example, /getUserInfo/{userId}. Special characters, such as asterisks (*), slashes (/), percent signs (%), hyphens (-), underscores (_), and periods (.), are allowed. It can contain a maximum of 512 characters and must comply with URI specifications. NOTE The address must comply with the URI specifications.
auth_type	String	API authentication mode. <ul style="list-style-type: none"> • NONE • APP • IAM • AUTHORIZER Enumeration values: <ul style="list-style-type: none"> • NONE • APP • IAM • AUTHORIZER
auth_opt	AuthOpt object	Security authentication parameter.
cors	Boolean	Indicates whether CORS is supported. <ul style="list-style-type: none"> • TRUE: supported • FALSE: not supported Default: false Enumeration values: <ul style="list-style-type: none"> • true • false

Parameter	Type	Description
match_mode	String	<p>API matching mode:</p> <ul style="list-style-type: none"> • SWA: Prefix match • NORMAL: Exact match Default value: NORMAL <p>Enumeration values:</p> <ul style="list-style-type: none"> • SWA • NORMAL
backend_type	String	<p>Backend type. Options:</p> <ul style="list-style-type: none"> • HTTP: web backend • FUNCTION: FunctionGraph backend. When backend_type is set to FUNCTION, the func_info field is mandatory. • MOCK: mock backend. When backend_type is set to MOCK, the mock_info field is mandatory. <p>Enumeration values:</p> <ul style="list-style-type: none"> • HTTP • FUNCTION • MOCK
remark	String	API description. It cannot exceed 255 characters.
group_id	String	ID of the API group to which the API belongs.
body_remark	String	API request body, which can be an example request body, media type, or parameters. Ensure that the request body does not exceed 20,480 characters.
result_normal_sample	String	Example response for a successful request. Ensure that the response does not exceed 20,480 characters.
result_failure_sample	String	Example response for a failed request. Ensure that the response does not exceed 20,480 characters.
authorizer_id	String	ID of the frontend custom authorizer.

Parameter	Type	Description
tags	Array of strings	<p>Tag.</p> <p>Use letters, digits, and special characters (-*#%.:_) and start with a letter.</p> <p>By default, 10 tags are supported. To increase the quota, contact technical support to modify the API_TAG_NUM_LIMIT configuration.</p> <p>Minimum: 1</p> <p>Maximum: 128</p>
response_id	String	Group response ID.
roma_app_id	String	<p>Integration application ID.</p> <p>Currently, this parameter is not supported.</p>
domain_name	String	<p>Custom domain name bound to the API.</p> <p>Currently, this parameter is not supported.</p>
tag	String	<p>Tag.</p> <p>This field will be deprecated. You can use the tags field instead.</p>
content_type	String	<p>Request content type:</p> <ul style="list-style-type: none"> • application/json • application/xml • multipart/form-data • text/plain <p>Coming soon.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • application/json • application/xml • multipart/form-data • text/plain
id	String	API ID.
status	Integer	<p>App status.</p> <ul style="list-style-type: none"> • 1: valid
arrange_necessary	Integer	Indicates whether to enable orchestration.
register_time	String	Time when the API is registered.
update_time	String	Time when the API was last modified.
group_name	String	Name of the API group to which the API belongs.

Parameter	Type	Description
group_version	String	Version of the API group to which the API belongs. The default value is V1. Other versions are not supported. Default: V1
run_env_id	String	ID of the environment in which the API has been published. Separate multiple environment IDs with vertical bars ().
run_env_name	String	Name of the environment in which the API has been published. Separate multiple environment names with vertical bars ().
publish_id	String	Publication record ID. Separate multiple publication record IDs with vertical bars ().
publish_time	String	Publication time. Separate the time of multiple publication records with vertical bars ().
roma_app_name	String	Name of the integration application to which the API belongs. Currently, this parameter is not supported.
ld_api_id	String	ID of the corresponding custom backend API. Currently, this parameter is not supported.
backend_api	BackendApi object	Backend information.
api_group_info	ApiGroupCommonInfo object	API group information.
req_params	Array of ReqParam objects	Request parameters.

Table 3-255 AuthOpt

Parameter	Type	Description
app_code_auth_type	String	<p>Indicates whether AppCode authentication is enabled. This parameter is valid only if auth_type is set to App. The default value is DISABLE.</p> <ul style="list-style-type: none"> • DISABLE: AppCode authentication is disabled. • HEADER: AppCode authentication is enabled and the AppCode is located in the header. <p>Default: DISABLE</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • DISABLE • HEADER

Table 3-256 BackendApi

Parameter	Type	Description
authorizer_id	String	Backend custom authorizer ID.
url_domain	String	<p>Backend service address.</p> <p>A backend service address consists of a domain name or IP address and a port number, with not more than 255 characters. It must be in the format "Host name:Port number", for example, apig.example.com:7443. If the port number is not specified, the default HTTPS port 443 or the default HTTP port 80 is used.</p> <p>Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.</p>
req_protocol	String	<p>Request protocol.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • HTTP • HTTPS
remark	String	Description. It cannot exceed 255 characters.

Parameter	Type	Description
req_method	String	Request method. Enumeration values: <ul style="list-style-type: none"> • GET • POST • PUT • DELETE • HEAD • PATCH • OPTIONS • ANY
version	String	Web backend version, which can contain a maximum of 16 characters.
req_uri	String	Request address, which can contain request parameters enclosed with braces ({}). For example, /getUserInfo/{userId}. Special characters, such as asterisks (*), slashes (/), percent signs (%), hyphens (-), underscores (_), and periods (.), are allowed. It can contain a maximum of 512 characters and must comply with URI specifications. Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed. NOTE The address must comply with the URI specifications.
timeout	Integer	Timeout allowed for APIG to request the backend service. You can set the maximum timeout using the backend_timeout configuration item. The maximum value is 600,000. Unit: ms. Minimum: 1
enable_client_ssl	Boolean	Indicates whether to enable two-way authentication.

Parameter	Type	Description
retry_count	String	Number of retry attempts to request the backend service. The default value is -1. The value ranges from -1 to 10. -1 indicates that idempotent APIs will retry once and non-idempotent APIs will not retry. POST and PATCH are non-idempotent. GET, HEAD, PUT, OPTIONS, and DELETE are idempotent. Default: -1
id	String	ID.
status	Integer	Backend service status. <ul style="list-style-type: none"> 1: valid
register_time	String	Registration time.
update_time	String	Update time.
vpc_channel_info	VpcInfo object	VPC channel details. This parameter is required if vpc_channel_status is set to 1.
vpc_channel_status	Integer	Indicates whether to use a VPC channel. <ul style="list-style-type: none"> 1: A VPC channel is used. 2: No VPC channel is used.

Table 3-257 VpcInfo

Parameter	Type	Description
ecs_id	String	Cloud server ID.
ecs_name	String	Cloud server name.
cascade_flag	Boolean	Indicates whether to use the cascading mode. Currently, this parameter is not supported.
vpc_channel_proxy_host	String	Proxy host.
vpc_channel_id	String	VPC channel ID.
vpc_channel_port	Integer	VPC channel port.

Table 3-258 ApiGroupCommonInfo

Parameter	Type	Description
id	String	ID.
name	String	API group name.
status	Integer	Status. <ul style="list-style-type: none"> 1: valid Enumeration values: <ul style="list-style-type: none"> 1
sl_domain	String	Subdomain name that APIG automatically allocates to the API group.
register_time	String	Creation time.
update_time	String	Last modification time.
on_sell_status	Integer	Indicates whether the API group has been listed on KooGallery. <ul style="list-style-type: none"> 1: listed 2: not listed 3: under review Not supported currently.
url_domains	Array of UrlDomain objects	Independent domain names bound to the API group.

Table 3-259 UrlDomain

Parameter	Type	Description
id	String	Domain ID.
domain	String	Domain name.
cname_status	Integer	CNAME resolution status of the domain name. <ul style="list-style-type: none"> 1: not resolved 2: resolving 3: resolved 4: resolution failed
ssl_id	String	SSL certificate ID.
ssl_name	String	SSL certificate name.

Parameter	Type	Description
min_ssl_version	String	Minimum SSL version. TLS 1.1 and TLS 1.2 are supported. Default: TLSv1.1 Enumeration values: <ul style="list-style-type: none"> • TLSv1.1 • TLSv1.2
verified_client_certificate_enabled	Boolean	Whether to enable client certificate verification. This parameter is available only when a certificate is bound. It is enabled by default if trusted_root_ca exists, and disabled if trusted_root_ca does not exist. Default: false
is_has_trusted_root_ca	Boolean	Whether a trusted root certificate (CA) exists. The value is true if trusted_root_ca exists in the bound certificate. Default: false

Table 3-260 ReqParam

Parameter	Type	Description
name	String	Parameter name. The parameter name can contain 1 to 32 characters and must start with a letter. Only letters, digits, hyphens (-), underscores (_), and periods (.) are allowed.
type	String	Parameter type. Enumeration values: <ul style="list-style-type: none"> • STRING • NUMBER
location	String	Parameter location. Enumeration values: <ul style="list-style-type: none"> • PATH • QUERY • HEADER
default_value	String	Default value.
sample_value	String	Example value.

Parameter	Type	Description
required	Integer	Indicates whether the parameter is required. 1: yes 2: no The value of this parameter is 1 if Location is set to PATH, and 2 if Location is set to another value. Enumeration values: <ul style="list-style-type: none"> • 1 • 2
valid_enable	Integer	Indicates whether validity check is enabled. <ul style="list-style-type: none"> • 1: enabled • 2: disabled Default: 2 Enumeration values: <ul style="list-style-type: none"> • 1 • 2
remark	String	Description. It cannot exceed 255 characters.
enumerations	String	Enumerated value.
min_num	Integer	Minimum value. This parameter is valid when type is set to NUMBER.
max_num	Integer	Maximum value. This parameter is valid when type is set to NUMBER.
min_size	Integer	Minimum length. This parameter is valid when type is set to STRING.
max_size	Integer	Maximum length. This parameter is valid when type is set to STRING.
regular	String	Regular expression validation rule. Currently, this parameter is not supported.
json_schema	String	JSON validation rule. Currently, this parameter is not supported.

Parameter	Type	Description
pass_through	Integer	Indicates whether to transparently transfer the parameter. 1: yes 2: no Enumeration values: <ul style="list-style-type: none"> • 1 • 2
id	String	Parameter ID.

Status code: 400

Table 3-261 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-262 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-263 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-264 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total" : 3,
  "size" : 3,
  "apis" : [ {
    "arrange_necessary" : 2,
    "id" : "5f918d104dc84480a75166ba99efff21",
    "tags" : [ "webApi" ],
    "backend_type" : "HTTP",
    "auth_type" : "AUTHORIZER",
    "auth_opt" : {
      "app_code_auth_type" : "DISABLE"
    },
    "authorizer_id" : "8d0443832a194eaa84244e0c1c1912ac",
    "cors" : false,
    "status" : 1,
    "group_name" : "api_group_001",
    "group_id" : "c77f5e81d9cb4424bf704ef2b0ac7600",
    "group_version" : "V1",
    "match_mode" : "NORMAL",
    "name" : "Api_http",
    "req_protocol" : "HTTPS",
    "req_method" : "GET",
    "req_uri" : "/test/http",
    "type" : 1,
    "version" : "V0.0.1",
    "register_time" : "2020-07-31T12:42:51Z",
    "update_time" : "2020-08-02T16:32:47.046289Z",
    "remark" : "Web backend API"
  }, {
    "id" : "3a955b791bd24b1c9cd94c745f8d1aad",
    "group_id" : "c77f5e81d9cb4424bf704ef2b0ac7600",
    "group_name" : "api_group_001",
    "group_version" : "V1",
    "match_mode" : "SWA",
    "name" : "Api_mock",
    "auth_type" : "IAM",
    "auth_opt" : {
      "auth_code_auth_type" : "DISABLE"
    },
    "backend_type" : "MOCK",
    "cors" : false,
    "req_protocol" : "HTTPS",
    "req_uri" : "/test/mock",
    "remark" : "Mock backend API",
    "type" : 1,
    "version" : "V0.0.1",
```

```
"req_method" : "GET",
"result_normal_sample" : "Example success response",
"result_failure_sample" : "Example failure response",
"tags" : [ "mockApi" ],
"register_time" : "2020-08-02T15:56:52Z",
"update_time" : "2020-08-02T15:56:52Z",
"status" : 1
}, {
  "id" : "abd9c4b2ff974888b0ba79be7e6b2763",
  "arrange_necessary" : 2,
  "group_id" : "c77f5e81d9cb4424bf704ef2b0ac7600",
  "group_name" : "api_group_001",
  "group_version" : "V1",
  "match_mode" : "NORMAL",
  "name" : "Api_function",
  "auth_type" : "APP",
  "auth_opt" : {
    "auth_code_auth_type" : "DISABLE"
  },
  "backend_type" : "FUNCTION",
  "cors" : false,
  "req_protocol" : "HTTPS",
  "req_uri" : "/test/function",
  "remark" : "FunctionGraph backend API",
  "type" : 1,
  "version" : "V0.0.1",
  "status" : 1,
  "req_method" : "GET",
  "tags" : [ "functionApi" ],
  "register_time" : "2020-08-02T15:36:19Z",
  "update_time" : "2020-08-02T15:47:53.499266Z"
}]
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.5.7 Debugging an API

Function

This API is used to debug an API in a specified environment. The API caller must have the permissions required for accessing this API.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances/{instance_id}/apis/debug/{api_id}

Table 3-265 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
api_id	Yes	String	API ID.

Request Parameters

Table 3-266 Request header parameters

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

Table 3-267 Request body parameters

Parameter	Mandatory	Type	Description
body	No	String	Message body, with a maximum of 2,097,152 bytes.
header	No	Map<String,Array<String>>	<p>Header parameters, with each value being a character string array. Each parameter name must meet the following requirements:</p> <ul style="list-style-type: none"> • Contains letters, digits, periods (.), or hyphens (-). • Starts with a letter, with a maximum of 32 bytes. • Case-insensitive and cannot start with X-Apig- or X-Sdk-. • Case-insensitive and cannot be X-Stage. • Case-insensitive and cannot be X-Auth-Token or Authorization when mode is set to MARKET or CONSUMER. <p>NOTE Each header name is normalized before use. For example, x-MY-hEaDer is normalized as X-My-Header.</p>

Parameter	Mandatory	Type	Description
method	Yes	String	<p>API request method.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • GET • POST • PUT • DELETE • HEAD • PATCH • OPTIONS
mode	Yes	String	<p>Debugging mode:</p> <ul style="list-style-type: none"> • DEVELOPER: Debug the definitions of an API that has not been published. • CONSUMER: Debug the definitions of an API that has been published in a specified environment. <p>NOTE In DEVELOPER mode, the API caller must be the API provider.</p> <p>In CONSUMER mode, the API caller must be the API provider or has been authorized to access the API in a specific environment.</p>
path	Yes	String	<p>Request path of the API, starting with a slash (/) and containing up to 1024 characters.</p> <p>NOTE The request path must meet the requirements so that it can be correctly decoded after percent-encoding.</p>

Parameter	Mandatory	Type	Description
query	No	Map<String,Array<String>>	<p>Query strings, with each value being a character string array. Each parameter name must meet the following requirements:</p> <ul style="list-style-type: none"> • Contains letters, digits, periods (.), hyphens (-), or underscores (_). • Starts with a letter, with a maximum of 32 bytes. • Case-insensitive and cannot start with X-Apig- or X-Sdk-. • Case-insensitive and cannot be X-Stage.
scheme	Yes	String	<p>Request protocol.</p> <ul style="list-style-type: none"> • HTTP • HTTPS
app_key	No	String	AppKey used in the debugging request.
app_secret	No	String	AppSecret used in the debugging request.
domain	No	String	<p>Access domain name of the API. If no value is specified, one of the following default values will be used based on the mode:</p> <ul style="list-style-type: none"> • DEVELOPER: The subdomain name of the API group will be used. • MARKET: This parameter is not used currently. • CONSUMER: The subdomain name of the API group will be used.
stage	No	String	<p>Running environment specified by the debugging request. This parameter is valid only when mode is set to CONSUMER. If this parameter is not specified, the following default value is used:</p> <ul style="list-style-type: none"> • CONSUMER RELEASE

Response Parameters

Status code: 200

Table 3-268 Response body parameters

Parameter	Type	Description
request	String	Body of the debugging request.
response	String	Body of the debugging response, with a maximum of 2,097,152 bytes. Any content beyond this threshold will be truncated. NOTE Any content beyond the length limit will be truncated, and text [TRUNCATED] will be added to the response body.
latency	Integer	Debugging duration in milliseconds.
log	String	Debugging logs.

Status code: 400

Table 3-269 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-270 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-271 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Status code: 404

Table 3-272 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-273 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Debugging an API

```
{
  "mode" : "DEVELOPER",
  "scheme" : "HTTPS",
  "method" : "GET",
  "path" : "/test/mock"
}
```

Example Responses

Status code: 200

OK

```
{
  "request" : "GET /test/mock HTTP/1.1\nHost: c77f5e81d9cb4424bf704ef2b0ac7600.apic.***.com\nUser-Agent: APIGatewayDebugClient/1.0\nX-Apig-Mode: debug\n\n",
  "response" : "HTTP/1.1 200 OK\nTransfer-Encoding: chunked\nConnection: keep-alive\nContent-Type: application/json\nDate: Mon, 03 Aug 2020 02:51:22 GMT\nServer: api-gateway\nX-Apig-Latency: 0\nX-Apig-Ratelimit-Api: remain:99,limit:100,time:1 minute\nX-Apig-Ratelimit-Api-Allenv: remain:14999,limit:15000,time:1 second\nX-Request-Id: d4ec6e33148bdeffe8f55b43472d1251\n\nmock success",
  "latency" : 5,
  "log" : ""
}
```

Status code: 400

Bad Request

```
{  
  "error_code" : "APIG.2011",  
  "error_msg" : "Invalid parameter value,parameterName:mode. Please refer to the support documentation"  
}
```

Status code: 401

Unauthorized

```
{  
  "error_code" : "APIG.1002",  
  "error_msg" : "Incorrect token or token resolution failed"  
}
```

Status code: 403

Forbidden

```
{  
  "error_code" : "APIG.1005",  
  "error_msg" : "No permissions to request this method"  
}
```

Status code: 404

Not Found

```
{  
  "error_code" : "APIG.3002",  
  "error_msg" : "API 3a955b791bd24b1c9cd94c745f8d1aad does not exist"  
}
```

Status code: 500

Internal Server Error

```
{  
  "error_code" : "APIG.9999",  
  "error_msg" : "System error"  
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.5.8 Publishing APIs or Taking APIs Offline

Function

This API is used to publish multiple APIs in an environment or to remove multiple APIs from the environment in which they have been published.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances/{instance_id}/apis/publish

Table 3-274 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-275 Query Parameters

Parameter	Mandatory	Type	Description
action	Yes	String	<ul style="list-style-type: none"> online: publish APIs offline: take APIs offline

Request Parameters

Table 3-276 Request header parameters

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

Table 3-277 Request body parameters

Parameter	Mandatory	Type	Description
apis	No	Array of strings	IDs of APIs to be published or taken offline. A maximum of 1000 APIs are allowed at a time. Either apis or group_id must be specified.
env_id	Yes	String	Environment ID.
group_id	No	String	API group ID. Either apis or group_id must be specified.
remark	No	String	Description of the publication. It cannot exceed 255 characters.

Response Parameters

Status code: 200

Table 3-278 Response body parameters

Parameter	Type	Description
success	Array of PublishResp objects	Message for successful API publication or taking offline.
failure	Array of BatchFailure objects	Error message and APIs that fail to be published or taken offline.

Table 3-279 PublishResp

Parameter	Type	Description
publish_id	String	Publication record ID.
api_id	String	API ID.
api_name	String	API name.
env_id	String	ID of the environment in which the API has been published.
remark	String	Description about the publication.
publish_time	String	Publication time.

Parameter	Type	Description
version_id	String	API version currently in use.

Table 3-280 BatchFailure

Parameter	Type	Description
api_id	String	ID of an API that fails to be published or taken offline.
api_name	String	Name of an API that fails to be published or taken offline.
error_code	String	Error code.
error_msg	String	Error message.

Status code: 400

Table 3-281 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-282 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-283 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-284 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Publishing APIs

```
{
  "apis": [ "3a955b791bd24b1c9cd94c745f8d1aad", "abd9c4b2ff974888b0ba79be7e6b2762" ],
  "env_id": "DEFAULT_ENVIRONMENT_RELEASE_ID",
  "group_id": "c77f5e81d9cb4424bf704ef2b0ac7600",
  "remark": "Published to the production environment"
}
```

Example Responses

Status code: 200

OK

```
{
  "success": [ {
    "publish_id": "9f27d1dc4f4242a9abf88e563dbfc33d",
    "api_id": "3a955b791bd24b1c9cd94c745f8d1aad",
    "api_name": "Api_mock",
    "env_id": "DEFAULT_ENVIRONMENT_RELEASE_ID",
    "version_id": "632b2c9e022941969af9a1d45735ae2c",
    "remark": "Published to the production environment",
    "publish_time": "2020-08-03T03:01:31.26522821Z"
  } ],
  "failure": [ {
    "api_id": "abd9c4b2ff974888b0ba79be7e6b2762",
    "error_code": "APIG.3002",
    "error_msg": "Api abd9c4b2ff974888b0ba79be7e6b2762 not found"
  } ]
}
```

Status code: 400

Bad Request

```
{
  "error_code": "APIG.2011",
  "error_msg": "Invalid parameter value: parameter action should be \\\"online\\\" or \\\"offline\\\"\""
}
```

Status code: 401

Unauthorized

```
{
  "error_code": "APIG.1002",
  "error_msg": "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.5.9 Querying Historical Versions of an API

Function

This API is used to query the historical versions of an API. APIG retains a maximum of 10 historical versions for each API in an environment.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/apis/publish/{api_id}

Table 3-285 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
api_id	Yes	String	API ID.

Table 3-286 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20
env_id	No	String	Environment ID.
env_name	No	String	Environment name.

Request Parameters

Table 3-287 Request header parameters

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

Response Parameters

Status code: 200

Table 3-288 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
api_versions	Array of ApiVersionResp objects	Historical version list.

Table 3-289 ApiVersionResp

Parameter	Type	Description
version_id	String	API version ID.
version_no	String	API version.
api_id	String	API ID.
env_id	String	ID of the environment in which the API has been published.
env_name	String	Name of the environment in which the API has been published.
remark	String	Description about the publication.
publish_time	String	Publication time.

Parameter	Type	Description
status	Integer	Version status. <ul style="list-style-type: none"> • 1: effective • 2: not effective Enumeration values: <ul style="list-style-type: none"> • 1 • 2

Status code: 400

Table 3-290 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-291 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-292 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-293 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-294 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total": 1,
  "size": 1,
  "api_versions": [ {
    "version_id": "ee1a5a38d3d3493abf1dc4ed6cacfa0b",
    "version_no": "20200803093600",
    "api_id": "5f918d104dc84480a75166ba99efff21",
    "env_id": "DEFAULT_ENVIRONMENT_RELEASE_ID",
    "env_name": "RELEASE",
    "publish_time": "2020-08-03T01:36:00Z",
    "status": 1
  } ]
}
```

Status code: 400

Bad Request

```
{
  "error_code": "APIG.2012",
  "error_msg": "Invalid parameter value,parameterName:env_name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code": "APIG.1002",
```

```
{
  "error_msg": "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code": "APIG.1005",
  "error_msg": "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code": "APIG.3002",
  "error_msg": "API 5f918d104dc84480a75166ba99efff21 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code": "APIG.9999",
  "error_msg": "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.5.10 Switching the Version of an API

Function

This API is used to switch the version of an API. A version is generated based on the current definition of an API when the API is published. The version records the definition and status of the API when it is published.

You can switch between multiple versions of an API, but only one version of an API takes effect in the same environment.

Calling Method

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

URI

PUT /v2/{project_id}/apigw/instances/{instance_id}/apis/publish/{api_id}

Table 3-295 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
api_id	Yes	String	API ID.

Request Parameters

Table 3-296 Request header parameters

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

Table 3-297 Request body parameters

Parameter	Mandatory	Type	Description
version_id	No	String	API version ID.

Response Parameters

Status code: 200

Table 3-298 Response body parameters

Parameter	Type	Description
publish_id	String	Publication record ID.
api_id	String	API ID.
api_name	String	API name.
env_id	String	ID of the environment in which the API has been published.
remark	String	Description about the publication.
publish_time	String	Publication time.
version_id	String	API version currently in use.

Status code: 400

Table 3-299 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-300 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-301 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-302 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-303 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Switching an API to a specified version

```
{
  "version_id" : "ee1a5a38d3d3493abf1dc4ed6cacfa0b"
}
```

Example Responses

Status code: 200

OK

```
{
  "publish_id" : "9191cdb430724d4b8586ed7f1b962ca2",
  "api_id" : "5f918d104dc84480a75166ba99efff21",
  "env_id" : "DEFAULT_ENVIRONMENT_RELEASE_ID",
  "version_id" : "ee1a5a38d3d3493abf1dc4ed6cacfa0b",
  "publish_time" : "2020-08-03T03:27:49.483295655Z"
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2000",
  "error_msg" : "Parameter error: Serialization error: unexpected end of JSON input"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
```



```
{
  "error_msg": "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code": "APIG.1005",
  "error_msg": "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code": "APIG.3022",
  "error_msg": "The API version does not exist,id:ee1a5a38d3d3493abf1dc4ed6cacfa0b"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code": "APIG.9999",
  "error_msg": "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.5.11 Querying the Runtime Definition of an API

Function

This API is used to query the runtime definition of an API in a specified environment. The runtime definition of an API in the RELEASE environment is queried if no environment is specified.

The definition of an API is classified into the following types:

- Temporary definition: definition of an API used after the API was last edited.
- Runtime definition: snapshot of the temporary definition of an API captured when the API is published in an environment.

The runtime definition of an API is accessed when the API is called in an environment.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/apis/runtime/{api_id}

Table 3-304 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
api_id	Yes	String	API ID.

Table 3-305 Query Parameters

Parameter	Mandatory	Type	Description
env_id	No	String	ID of the environment in which the API is published.

Request Parameters

Table 3-306 Request header parameters

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

Response Parameters

Status code: 200

Table 3-307 Response body parameters

Parameter	Type	Description
name	String	API name. It can contain 3 to 255 characters, starting with a letter or digit. Only letters, digits, and these special characters are allowed: -_./:()
type	Integer	API type. <ul style="list-style-type: none"> 1: public API 2: private API Enumeration values: <ul style="list-style-type: none"> 1 2
version	String	API version. Maximum: 16
req_protocol	String	API request protocol: <ul style="list-style-type: none"> HTTP HTTPS BOTH: Both HTTP and HTTPS are supported. Default: HTTPS Enumeration values: <ul style="list-style-type: none"> HTTP HTTPS BOTH
req_method	String	API request method. Enumeration values: <ul style="list-style-type: none"> GET POST PUT DELETE HEAD PATCH OPTIONS ANY

Parameter	Type	Description
req_uri	String	Request address, which can contain request parameters enclosed with braces ({}). For example, /getUserInfo/{userId}. Special characters, such as asterisks (*), slashes (/), percent signs (%), hyphens (-), underscores (_), and periods (.), are allowed. It can contain a maximum of 512 characters and must comply with URI specifications. NOTE The address must comply with the URI specifications.
auth_type	String	API authentication mode. <ul style="list-style-type: none"> • NONE • APP • IAM • AUTHORIZER Enumeration values: <ul style="list-style-type: none"> • NONE • APP • IAM • AUTHORIZER
auth_opt	AuthOpt object	Security authentication parameter.
cors	Boolean	Indicates whether CORS is supported. <ul style="list-style-type: none"> • TRUE: supported • FALSE: not supported Default: false Enumeration values: <ul style="list-style-type: none"> • true • false
match_mode	String	API matching mode: <ul style="list-style-type: none"> • SWA: Prefix match • NORMAL: Exact match Default value: NORMAL Enumeration values: <ul style="list-style-type: none"> • SWA • NORMAL

Parameter	Type	Description
backend_type	String	Backend type. Options: <ul style="list-style-type: none"> • HTTP: web backend • FUNCTION: FunctionGraph backend. When backend_type is set to FUNCTION, the func_info field is mandatory. • MOCK: mock backend. When backend_type is set to MOCK, the mock_info field is mandatory. Enumeration values: <ul style="list-style-type: none"> • HTTP • FUNCTION • MOCK
remark	String	API description. It cannot exceed 255 characters.
group_id	String	ID of the API group to which the API belongs.
body_remark	String	API request body, which can be an example request body, media type, or parameters. Ensure that the request body does not exceed 20,480 characters.
result_normal_sample	String	Example response for a successful request. Ensure that the response does not exceed 20,480 characters.
result_failure_sample	String	Example response for a failed request. Ensure that the response does not exceed 20,480 characters.
authorizer_id	String	ID of the frontend custom authorizer.
tags	Array of strings	Tag. Use letters, digits, and special characters (-*#%.:_) and start with a letter. By default, 10 tags are supported. To increase the quota, contact technical support to modify the API_TAG_NUM_LIMIT configuration. Minimum: 1 Maximum: 128
response_id	String	Group response ID.
roma_app_id	String	Integration application ID. Currently, this parameter is not supported.
domain_name	String	Custom domain name bound to the API. Currently, this parameter is not supported.

Parameter	Type	Description
tag	String	Tag. This field will be deprecated. You can use the tags field instead.
content_type	String	Request content type: <ul style="list-style-type: none"> • application/json • application/xml • multipart/form-data • text/plain Coming soon. Enumeration values: <ul style="list-style-type: none"> • application/json • application/xml • multipart/form-data • text/plain
id	String	API ID.
group_name	String	Name of the API group to which the API belongs.
run_env_name	String	Name of the environment in which the API has been published.
run_env_id	String	ID of the environment in which the API has been published.
publish_id	String	Publication record ID.
sl_domain	String	Subdomain name of the API group.
sl_domains	Array of strings	Subdomain names that APIG automatically allocates to the API group.
req_params	Array of ReqParam objects	Request parameters.

Table 3-308 AuthOpt

Parameter	Type	Description
app_code_auth_type	String	<p>Indicates whether AppCode authentication is enabled. This parameter is valid only if auth_type is set to App. The default value is DISABLE.</p> <ul style="list-style-type: none"> • DISABLE: AppCode authentication is disabled. • HEADER: AppCode authentication is enabled and the AppCode is located in the header. <p>Default: DISABLE</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • DISABLE • HEADER

Table 3-309 ReqParam

Parameter	Type	Description
name	String	<p>Parameter name.</p> <p>The parameter name can contain 1 to 32 characters and must start with a letter. Only letters, digits, hyphens (-), underscores (_), and periods (.) are allowed.</p>
type	String	<p>Parameter type.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • STRING • NUMBER
location	String	<p>Parameter location.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • PATH • QUERY • HEADER
default_value	String	Default value.
sample_value	String	Example value.

Parameter	Type	Description
required	Integer	Indicates whether the parameter is required. 1: yes 2: no The value of this parameter is 1 if Location is set to PATH, and 2 if Location is set to another value. Enumeration values: <ul style="list-style-type: none"> • 1 • 2
valid_enable	Integer	Indicates whether validity check is enabled. <ul style="list-style-type: none"> • 1: enabled • 2: disabled Default: 2 Enumeration values: <ul style="list-style-type: none"> • 1 • 2
remark	String	Description. It cannot exceed 255 characters.
enumerations	String	Enumerated value.
min_num	Integer	Minimum value. This parameter is valid when type is set to NUMBER.
max_num	Integer	Maximum value. This parameter is valid when type is set to NUMBER.
min_size	Integer	Minimum length. This parameter is valid when type is set to STRING.
max_size	Integer	Maximum length. This parameter is valid when type is set to STRING.
regular	String	Regular expression validation rule. Currently, this parameter is not supported.
json_schema	String	JSON validation rule. Currently, this parameter is not supported.

Parameter	Type	Description
pass_through	Integer	Indicates whether to transparently transfer the parameter. 1: yes 2: no Enumeration values: <ul style="list-style-type: none"> • 1 • 2
id	String	Parameter ID.

Status code: 401

Table 3-310 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-311 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-312 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-313 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "name" : "Api_http",
  "type" : 1,
  "version" : "V0.0.1",
  "req_protocol" : "HTTPS",
  "req_method" : "GET",
  "req_uri" : "/test/http",
  "auth_type" : "AUTHORIZER",
  "authorizer_id" : "8d0443832a194eaa84244e0c1c1912ac",
  "auth_opt" : {
    "app_code_auth_type" : "DISABLE"
  },
  "cors" : false,
  "match_mode" : "NORMAL",
  "backend_type" : "HTTP",
  "remark" : "Web backend API",
  "group_id" : "c77f5e81d9cb4424bf704ef2b0ac7600",
  "result_normal_sample" : "Example success response",
  "result_failure_sample" : "Example failure response",
  "id" : "5f918d104dc84480a75166ba99efff21",
  "group_name" : "api_group_001",
  "run_env_id" : "DEFAULT_ENVIRONMENT_RELEASE_ID",
  "run_env_name" : "RELEASE",
  "publish_id" : "9191cdb430724d4b8586ed7f1b962ca2",
  "sl_domain" : "c77f5e81d9cb4424bf704ef2b0ac7600.apic.***.com",
  "sl_domains" : [ "c77f5e81d9cb4424bf704ef2b0ac7600.apic.***.com",
    "c77f5e81d9cb4424bf704ef2b0ac7600.apic.***.cn" ]
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3002",
  "error_msg" : "API 5f918d104dc84480a75166ba99efff21 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.5.12 Querying API Version Details

Function

This API is used to query the details of a specified API version.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/apis/versions/{version_id}

Table 3-314 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
version_id	Yes	String	API version.

Request Parameters

Table 3-315 Request header parameters

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

Response Parameters

Status code: 200

Table 3-316 Response body parameters

Parameter	Type	Description
name	String	API name. It can contain 3 to 255 characters, starting with a letter or digit. Only letters, digits, and these special characters are allowed: -_./:()
type	Integer	API type. <ul style="list-style-type: none"> 1: public API 2: private API Enumeration values: <ul style="list-style-type: none"> 1 2

Parameter	Type	Description
version	String	API version. Maximum: 16
req_protocol	String	API request protocol: <ul style="list-style-type: none"> • HTTP • HTTPS • BOTH: Both HTTP and HTTPS are supported. Default: HTTPS Enumeration values: <ul style="list-style-type: none"> • HTTP • HTTPS • BOTH
req_method	String	API request method. Enumeration values: <ul style="list-style-type: none"> • GET • POST • PUT • DELETE • HEAD • PATCH • OPTIONS • ANY
req_uri	String	Request address, which can contain request parameters enclosed with braces ({}). For example, /getUserInfo/{userId}. Special characters, such as asterisks (*), slashes (/), percent signs (%), hyphens (-), underscores (_), and periods (.), are allowed. It can contain a maximum of 512 characters and must comply with URI specifications. NOTE The address must comply with the URI specifications.

Parameter	Type	Description
auth_type	String	API authentication mode. <ul style="list-style-type: none"> • NONE • APP • IAM • AUTHORIZER Enumeration values: <ul style="list-style-type: none"> • NONE • APP • IAM • AUTHORIZER
auth_opt	AuthOpt object	Security authentication parameter.
cors	Boolean	Indicates whether CORS is supported. <ul style="list-style-type: none"> • TRUE: supported • FALSE: not supported Default: false Enumeration values: <ul style="list-style-type: none"> • true • false
match_mode	String	API matching mode: <ul style="list-style-type: none"> • SWA: Prefix match • NORMAL: Exact match Default value: NORMAL Enumeration values: <ul style="list-style-type: none"> • SWA • NORMAL
backend_type	String	Backend type. Options: <ul style="list-style-type: none"> • HTTP: web backend • FUNCTION: FunctionGraph backend. When backend_type is set to FUNCTION, the func_info field is mandatory. • MOCK: mock backend. When backend_type is set to MOCK, the mock_info field is mandatory. Enumeration values: <ul style="list-style-type: none"> • HTTP • FUNCTION • MOCK

Parameter	Type	Description
remark	String	API description. It cannot exceed 255 characters.
group_id	String	ID of the API group to which the API belongs.
body_remark	String	API request body, which can be an example request body, media type, or parameters. Ensure that the request body does not exceed 20,480 characters.
result_normal_sample	String	Example response for a successful request. Ensure that the response does not exceed 20,480 characters.
result_failure_sample	String	Example response for a failed request. Ensure that the response does not exceed 20,480 characters.
authorizer_id	String	ID of the frontend custom authorizer.
tags	Array of strings	Tag. Use letters, digits, and special characters (-*#%.:_) and start with a letter. By default, 10 tags are supported. To increase the quota, contact technical support to modify the API_TAG_NUM_LIMIT configuration. Minimum: 1 Maximum: 128
response_id	String	Group response ID.
roma_app_id	String	Integration application ID. Currently, this parameter is not supported.
domain_name	String	Custom domain name bound to the API. Currently, this parameter is not supported.
tag	String	Tag. This field will be deprecated. You can use the tags field instead.

Parameter	Type	Description
content_type	String	Request content type: <ul style="list-style-type: none"> • application/json • application/xml • multipart/form-data • text/plain Coming soon. Enumeration values: <ul style="list-style-type: none"> • application/json • application/xml • multipart/form-data • text/plain
id	String	API ID.
status	Integer	App status. <ul style="list-style-type: none"> • 1: valid
arrange_necessary	Integer	Indicates whether to enable orchestration.
register_time	String	Time when the API is registered.
update_time	String	Time when the API was last modified.
group_name	String	Name of the API group to which the API belongs.
group_version	String	Version of the API group to which the API belongs. The default value is V1. Other versions are not supported. Default: V1
run_env_id	String	ID of the environment in which the API has been published. Separate multiple environment IDs with vertical bars ().
run_env_name	String	Name of the environment in which the API has been published. Separate multiple environment names with vertical bars ().
publish_id	String	Publication record ID. Separate multiple publication record IDs with vertical bars ().
publish_time	String	Time when the API version is published.

Parameter	Type	Description
roma_app_name	String	Name of the integration application to which the API belongs. Currently, this parameter is not supported.
ld_api_id	String	ID of the corresponding custom backend API. Currently, this parameter is not supported.
backend_api	BackendApi object	Web backend details.
api_group_info	ApiGroupCommonInfo object	API group information.
func_info	ApiFunc object	FunctionGraph backend details.
mock_info	ApiMock object	Mock backend details.
req_params	Array of ReqParam objects	Request parameters.
backend_params	Array of BackendParam objects	Backend parameters.
policy_functions	Array of ApiPolicyFunctionResp objects	FunctionGraph backend policies.
policy_mocks	Array of ApiPolicyMockResp objects	Mock backend policies.
policy_https	Array of ApiPolicyHttpResp objects	Web backend policies.
sl_domain	String	Subdomain name that API Gateway automatically allocates to the API group.
sl_domains	Array of strings	Subdomain names that API Gateway automatically allocates to the API group.
version_id	String	API version ID.

Table 3-317 AuthOpt

Parameter	Type	Description
app_code_auth_type	String	<p>Indicates whether AppCode authentication is enabled. This parameter is valid only if auth_type is set to App. The default value is DISABLE.</p> <ul style="list-style-type: none"> • DISABLE: AppCode authentication is disabled. • HEADER: AppCode authentication is enabled and the AppCode is located in the header. <p>Default: DISABLE</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • DISABLE • HEADER

Table 3-318 BackendApi

Parameter	Type	Description
authorizer_id	String	Backend custom authorizer ID.
url_domain	String	<p>Backend service address.</p> <p>A backend service address consists of a domain name or IP address and a port number, with not more than 255 characters. It must be in the format "Host name:Port number", for example, apig.example.com:7443. If the port number is not specified, the default HTTPS port 443 or the default HTTP port 80 is used.</p> <p>Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.</p>
req_protocol	String	<p>Request protocol.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • HTTP • HTTPS
remark	String	Description. It cannot exceed 255 characters.

Parameter	Type	Description
req_method	String	Request method. Enumeration values: <ul style="list-style-type: none"> • GET • POST • PUT • DELETE • HEAD • PATCH • OPTIONS • ANY
version	String	Web backend version, which can contain a maximum of 16 characters.
req_uri	String	Request address, which can contain request parameters enclosed with braces ({}). For example, /getUserInfo/{userId}. Special characters, such as asterisks (*), slashes (/), percent signs (%), hyphens (-), underscores (_), and periods (.), are allowed. It can contain a maximum of 512 characters and must comply with URI specifications. Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed. NOTE The address must comply with the URI specifications.
timeout	Integer	Timeout allowed for APIG to request the backend service. You can set the maximum timeout using the backend_timeout configuration item. The maximum value is 600,000. Unit: ms. Minimum: 1
enable_client_ssl	Boolean	Indicates whether to enable two-way authentication.

Parameter	Type	Description
retry_count	String	Number of retry attempts to request the backend service. The default value is -1. The value ranges from -1 to 10. -1 indicates that idempotent APIs will retry once and non-idempotent APIs will not retry. POST and PATCH are non-idempotent. GET, HEAD, PUT, OPTIONS, and DELETE are idempotent. Default: -1
id	String	ID.
status	Integer	Backend service status. <ul style="list-style-type: none"> 1: valid
register_time	String	Registration time.
update_time	String	Update time.
vpc_channel_info	VpcInfo object	VPC channel details. This parameter is required if vpc_channel_status is set to 1.
vpc_channel_status	Integer	Indicates whether to use a VPC channel. <ul style="list-style-type: none"> 1: A VPC channel is used. 2: No VPC channel is used.

Table 3-319 ApiGroupCommonInfo

Parameter	Type	Description
id	String	ID.
name	String	API group name.
status	Integer	Status. <ul style="list-style-type: none"> 1: valid Enumeration values: <ul style="list-style-type: none"> 1
sl_domain	String	Subdomain name that APIG automatically allocates to the API group.
register_time	String	Creation time.
update_time	String	Last modification time.

Parameter	Type	Description
on_sell_status	Integer	Indicates whether the API group has been listed on KooGallery. <ul style="list-style-type: none"> • 1: listed • 2: not listed • 3: under review Not supported currently.
url_domains	Array of UrlDomain objects	Independent domain names bound to the API group.

Table 3-320 UrlDomain

Parameter	Type	Description
id	String	Domain ID.
domain	String	Domain name.
cname_status	Integer	CNAME resolution status of the domain name. <ul style="list-style-type: none"> • 1: not resolved • 2: resolving • 3: resolved • 4: resolution failed
ssl_id	String	SSL certificate ID.
ssl_name	String	SSL certificate name.
min_ssl_version	String	Minimum SSL version. TLS 1.1 and TLS 1.2 are supported. Default: TLSv1.1 Enumeration values: <ul style="list-style-type: none"> • TLSv1.1 • TLSv1.2
verified_client_certificate_enabled	Boolean	Whether to enable client certificate verification. This parameter is available only when a certificate is bound. It is enabled by default if trusted_root_ca exists, and disabled if trusted_root_ca does not exist. Default: false
is_has_trusted_root_ca	Boolean	Whether a trusted root certificate (CA) exists. The value is true if trusted_root_ca exists in the bound certificate. Default: false

Table 3-321 ApiFunc

Parameter	Type	Description
function_urn	String	Function URN.
remark	String	Description. It cannot exceed 255 characters.
invocation_type	String	Invocation mode. <ul style="list-style-type: none"> • async: asynchronous • sync: synchronous Enumeration values: <ul style="list-style-type: none"> • async • sync
network_type	String	Function network architecture. <ul style="list-style-type: none"> • V1: non-VPC • V2: VPC Enumeration values: <ul style="list-style-type: none"> • V1 • V2
version	String	Function version. If both a function alias URN and version are passed, only the alias URN will be used. Maximum: 64
alias_urn	String	Function alias URN. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored.
timeout	Integer	Timeout allowed for APIG to request the backend service. If the function network architecture is set to V1, the maximum timeout is 60,000. If the network architecture is set to V2, the maximum timeout is 600,000 and can be modified by using the gateway parameter backend_timeout. Unit: ms. Minimum: 1
authorizer_id	String	Backend custom authorizer ID.
id	String	ID.
register_time	String	Registration time.
status	Integer	Backend service status. <ul style="list-style-type: none"> • 1: valid

Parameter	Type	Description
update_time	String	Update time.

Table 3-322 ApiMock

Parameter	Type	Description
remark	String	Description. It cannot exceed 255 characters.
result_content	String	Response.
version	String	Function version. It cannot exceed 64 characters.
authorizer_id	String	Backend custom authorizer ID.
id	String	ID.
register_time	String	Registration time.
status	Integer	Backend service status. <ul style="list-style-type: none"> • 1: valid
update_time	String	Update time.

Table 3-323 ReqParam

Parameter	Type	Description
name	String	Parameter name. The parameter name can contain 1 to 32 characters and must start with a letter. Only letters, digits, hyphens (-), underscores (_), and periods (.) are allowed.
type	String	Parameter type. Enumeration values: <ul style="list-style-type: none"> • STRING • NUMBER
location	String	Parameter location. Enumeration values: <ul style="list-style-type: none"> • PATH • QUERY • HEADER
default_value	String	Default value.
sample_value	String	Example value.

Parameter	Type	Description
required	Integer	Indicates whether the parameter is required. 1: yes 2: no The value of this parameter is 1 if Location is set to PATH, and 2 if Location is set to another value. Enumeration values: <ul style="list-style-type: none"> • 1 • 2
valid_enable	Integer	Indicates whether validity check is enabled. <ul style="list-style-type: none"> • 1: enabled • 2: disabled Default: 2 Enumeration values: <ul style="list-style-type: none"> • 1 • 2
remark	String	Description. It cannot exceed 255 characters.
enumerations	String	Enumerated value.
min_num	Integer	Minimum value. This parameter is valid when type is set to NUMBER.
max_num	Integer	Maximum value. This parameter is valid when type is set to NUMBER.
min_size	Integer	Minimum length. This parameter is valid when type is set to STRING.
max_size	Integer	Maximum length. This parameter is valid when type is set to STRING.
regular	String	Regular expression validation rule. Currently, this parameter is not supported.
json_schema	String	JSON validation rule. Currently, this parameter is not supported.

Parameter	Type	Description
pass_through	Integer	Indicates whether to transparently transfer the parameter. 1: yes 2: no Enumeration values: <ul style="list-style-type: none"> • 1 • 2
id	String	Parameter ID.

Table 3-324 ApiPolicyFunctionResp

Parameter	Type	Description
function_urn	String	Function URN.
invocation_type	String	Invocation mode. <ul style="list-style-type: none"> • async: asynchronous • sync: synchronous Enumeration values: <ul style="list-style-type: none"> • async • sync
network_type	String	Function network architecture. <ul style="list-style-type: none"> • V1: non-VPC • V2: VPC Enumeration values: <ul style="list-style-type: none"> • V1 • V2
version	String	Function version. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored. Maximum: 64
alias_urn	String	Function alias URN. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored.

Parameter	Type	Description
timeout	Integer	Timeout allowed for APIG to request the backend service. If the function network architecture is set to V1, the maximum timeout is 60,000. If the network architecture is set to V2, the maximum timeout is 600,000 and can be modified by using the gateway parameter <code>backend_timeout</code> . Unit: ms. Minimum: 1
id	String	ID.
effect_mode	String	Effective mode of the backend policy. <ul style="list-style-type: none"> • ALL: All conditions are met. • ANY: Any condition is met. Enumeration values: <ul style="list-style-type: none"> • ALL • ANY
name	String	Backend name, which must start with a letter and can contain letters, digits, and underscores (_). Minimum: 3 Maximum: 64
backend_params	Array of BackendParam objects	Backend parameters.
conditions	Array of ConditionResp objects	Policy conditions.
authorizer_id	String	Backend custom authorizer ID.

Table 3-325 ApiPolicyMockResp

Parameter	Type	Description
id	String	ID.
effect_mode	String	Effective mode of the backend policy. <ul style="list-style-type: none"> • ALL: All conditions are met. • ANY: Any condition is met. Enumeration values: <ul style="list-style-type: none"> • ALL • ANY

Parameter	Type	Description
name	String	Backend name, which must start with a letter and can contain letters, digits, and underscores (_). Minimum: 3 Maximum: 64
backend_params	Array of BackendParam objects	Backend parameters.
conditions	Array of ConditionResp objects	Policy conditions.
authorizer_id	String	Backend custom authorizer ID.
result_content	String	Response.

Table 3-326 ApiPolicyHttpResp

Parameter	Type	Description
id	String	ID.
effect_mode	String	Effective mode of the backend policy. <ul style="list-style-type: none"> • ALL: All conditions are met. • ANY: Any condition is met. Enumeration values: <ul style="list-style-type: none"> • ALL • ANY
name	String	Backend name, which must start with a letter and can contain letters, digits, and underscores (_). Minimum: 3 Maximum: 64
backend_params	Array of BackendParam objects	Backend parameters.
conditions	Array of ConditionResp objects	Policy conditions.
authorizer_id	String	Backend custom authorizer ID.

Parameter	Type	Description
url_domain	String	<p>Endpoint of the policy backend.</p> <p>An endpoint consists of a domain name or IP address and a port number, with not more than 255 characters. It must be in the format "Domain name:Port number", for example, apig.example.com:7443. If the port number is not specified, the default HTTPS port 443 or the default HTTP port 80 is used.</p> <p>Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.</p>
req_protocol	String	<p>Request protocol. Options include HTTP, HTTPS.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> ● HTTP ● HTTPS
req_method	String	<p>Request method. Options include GET, POST, PUT, DELETE, HEAD, PATCH, OPTIONS, and ANY.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> ● GET ● POST ● PUT ● DELETE ● HEAD ● PATCH ● OPTIONS ● ANY
req_uri	String	<p>Request address, which can contain request parameters enclosed with braces ({}). For example, /getUserInfo/{userId}. Special characters, such as asterisks (*), slashes (/), percent signs (%), hyphens (-), underscores (_), and periods (.), are allowed. It can contain a maximum of 512 characters and must comply with URI specifications.</p> <p>Environment variables are supported. Each must start with a letter and can consist of 3 to 32 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.</p> <p>NOTE The address must comply with the URI specifications.</p>

Parameter	Type	Description
timeout	Integer	Timeout allowed for APIG to request the backend service. You can set the maximum timeout using the backend_timeout configuration item. The maximum value is 600,000. Unit: ms. Minimum: 1
retry_count	String	Number of retry attempts to request the backend service. The default value is -1. The value ranges from -1 to 10. -1 indicates that idempotent APIs will retry once and non-idempotent APIs will not retry. POST and PATCH are non-idempotent. GET, HEAD, PUT, OPTIONS, and DELETE are idempotent. Default: -1
vpc_channel_info	VpcInfo object	VPC channel details. This parameter is required if vpc_channel_status is set to 1.
vpc_channel_status	Integer	Indicates whether to use a VPC channel. <ul style="list-style-type: none"> 1: A VPC channel is used. 2: No VPC channel is used.

Table 3-327 BackendParam

Parameter	Type	Description
origin	String	Parameter type. <ul style="list-style-type: none"> REQUEST: backend parameter CONSTANT: constant parameter SYSTEM: system parameter Enumeration values: <ul style="list-style-type: none"> REQUEST CONSTANT SYSTEM
name	String	Parameter name. The parameter name must start with a letter and can only contain letters, digits, hyphens (-), underscores (_), and periods (.). Minimum: 1 Maximum: 32

Parameter	Type	Description
remark	String	Description, which can contain a maximum of 255 characters.
location	String	Parameter location. The value can be PATH, QUERY, or HEADER. Enumeration values: <ul style="list-style-type: none">● PATH● QUERY● HEADER

Parameter	Type	Description
value	String	<p>Parameter value, which can contain a maximum of 255 characters.</p> <p>If the origin type is REQUEST, the value of this parameter is the parameter name in req_params.</p> <p>If the origin type is CONSTANT, the value is a constant.</p> <p>If the origin type is SYSTEM, the value is a system parameter name. System parameters include gateway parameters, frontend authentication parameters, and backend authentication parameters. You can set the frontend or backend authentication parameters after enabling custom frontend or backend authentication.</p> <p>The gateway parameters are as follows:</p> <ul style="list-style-type: none"> • \$context.sourceIp: source IP address of the API caller. • \$context.stage: deployment environment in which the API is called. • \$context.apid: API ID. • \$context.appid: ID of the app used by the API caller. • \$context.requestId: request ID generated when the API is called. • \$context.serverAddr: address of the gateway server. • \$context.serverName: name of the gateway server. • \$context.handleTime: time when the API request is processed. • \$context.providerAppId: ID of the app used by the API owner. This parameter is currently not supported. <p>Frontend authentication parameter: prefixed with "\$context.authorizer.frontend.". For example, to return "aaa" upon successful custom authentication, set this parameter to "\$context.authorizer.frontend.aaa".</p> <p>Backend authentication parameter: prefixed with "\$context.authorizer.backend.". For example, to return "aaa" upon successful custom authentication, set this parameter to "\$context.authorizer.backend.aaa".</p>
id	String	Parameter ID.

Parameter	Type	Description
req_param_id	String	Request parameter ID.

Table 3-328 CconditionResp

Parameter	Type	Description
req_param_name	String	Input parameter name. This parameter is required if the policy type is param.
condition_type	String	Policy condition. <ul style="list-style-type: none"> exact: Exact match enum: Enumeration pattern: Regular expression This parameter is required when the policy type is param. Enumeration values: <ul style="list-style-type: none"> exact enum pattern
condition_origin	String	Policy type <ul style="list-style-type: none"> param: parameter source: source IP address Enumeration values: <ul style="list-style-type: none"> param source
condition_value	String	Policy value. This parameter is required when the policy type is param, source, cookie, or frontend_authorizer.
id	String	ID.
req_param_id	String	Input parameter ID.
req_param_location	String	Input parameter location.

Table 3-329 VpcInfo

Parameter	Type	Description
ecs_id	String	Cloud server ID.
ecs_name	String	Cloud server name.

Parameter	Type	Description
cascade_flag	Boolean	Indicates whether to use the cascading mode. Currently, this parameter is not supported.
vpc_channel_proxy_host	String	Proxy host.
vpc_channel_id	String	VPC channel ID.
vpc_channel_port	Integer	VPC channel port.

Status code: 401

Table 3-330 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-331 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-332 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-333 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "name" : "Api_http",
  "type" : 1,
  "version" : "V0.0.1",
  "req_protocol" : "HTTPS",
  "req_method" : "GET",
  "req_uri" : "/test/http",
  "auth_type" : "AUTHORIZER",
  "auth_opt" : [ {
    "app_code_auth_type" : "DISABLE"
  } ],
  "authorizer_id" : "8d0443832a194eaa84244e0c1c1912ac",
  "cors" : false,
  "match_mode" : "NORMAL",
  "backend_type" : "HTTP",
  "group_id" : "c77f5e81d9cb4424bf704ef2b0ac7600",
  "result_normal_sample" : "Example success response",
  "result_failure_sample" : "Example failure response",
  "id" : "5f918d104dc84480a75166ba99efff21",
  "status" : 1,
  "arrange_necessary" : 2,
  "remark" : "Web backend API",
  "register_time" : "2020-07-31T12:42:51Z",
  "update_time" : "2020-08-02T16:32:47.046289Z",
  "group_name" : "api_group_001",
  "run_env_name" : "RELEASE",
  "run_env_id" : "DEFAULT_ENVIRONMENT_RELEASE_ID",
  "sl_domain" : "c77f5e81d9cb4424bf704ef2b0ac7600.apic.***.com",
  "sl_domains" : [ "c77f5e81d9cb4424bf704ef2b0ac7600.apic.***.com",
    "c77f5e81d9cb4424bf704ef2b0ac7600.apic.***.cn" ],
  "version_id" : "ee1a5a38d3d3493abf1dc4ed6cacfa0b",
  "publish_time" : "2020-08-03T01:36:00Z",
  "backend_api" : {
    "url_domain" : "56a7d7358e1b42459c9d730d65b14e59",
    "req_protocol" : "HTTPS",
    "req_method" : "GET",
    "req_uri" : "/test/benchmark",
    "timeout" : 5000,
    "id" : "1ce8fda3586d4371bd83c955df37e102",
    "status" : 1,
    "register_time" : "2020-07-31T12:42:51Z",
    "update_time" : "2020-08-02T16:32:47.077029Z",
    "vpc_channel_status" : 1,
    "vpc_channel_info" : {
      "cascade_flag" : false,
      "vpc_channel_id" : "56a7d7358e1b42459c9d730d65b14e59",

```

```

    "vpc_channel_proxy_host" : "www.example.com",
    "vpc_channel_port" : 0
  },
  "retry_count" : "-1"
},
"backend_params" : [ {
  "name" : "X-CONSTANT-HEADER",
  "location" : "HEADER",
  "origin" : "CONSTANT",
  "value" : "demo",
  "remark" : "constant_demo",
  "id" : "8cb2eba19e7a4423a4e835647a8b8d76"
}, {
  "name" : "app-id",
  "location" : "HEADER",
  "origin" : "SYSTEM",
  "value" : "$context.appId",
  "remark" : "App ID of the API caller",
  "id" : "216ddda836e74d528f364ff589d9dd21"
} ]
}

```

Status code: 401

Unauthorized

```

{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}

```

Status code: 403

Forbidden

```

{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}

```

Status code: 404

Not Found

```

{
  "error_code" : "APIG.3022",
  "error_msg" : "The API version does not exist,id:ee1a5a38d3d3493abf1dc4ed6cacfa0b"
}

```

Status code: 500

Internal Server Error

```

{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}

```

Status Codes

Status Code	Description
200	OK
401	Unauthorized

Status Code	Description
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.5.13 Taking an API Version Offline

Function

This API is used to remove an effective version of an API. The removed API cannot be called in the environment in which it took effect.

Calling Method

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

URI

DELETE /v2/{project_id}/apigw/instances/{instance_id}/apis/versions/{version_id}

Table 3-334 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
version_id	Yes	String	API version.

Request Parameters

Table 3-335 Request header parameters

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

Response Parameters

Status code: 401

Table 3-336 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-337 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-338 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-339 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3022",
  "error_msg" : "The API version does not exist,id:ee1a5a38d3d3493abf1dc4ed6cacfa0b"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
204	No Content
401	Unauthorized
403	Forbidden

Status Code	Description
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.6 Signature Key Management

3.6.1 Creating a Signature Key

Function

It is a good practice to provide a protection mechanism for APIs to ensure access security. For example, authenticating API request sources and denying the access from unauthorized sources.

A signature key is a protection mechanism in case.

Create a signature key and bind it to an API. When requesting the API, APIG uses the signature key to encrypt request parameter data and generate a signature. The backend service of the API verifies requests by using the signature. Unauthorized requests will be denied to protect the API against attacks from unknown sources.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances/{instance_id}/signs

Table 3-340 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-341 Request header parameters

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

Table 3-342 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Signature key name. It can contain letters, digits, and underscores(_) and must start with a letter. Minimum: 3 Maximum: 64

Parameter	Mandatory	Type	Description
sign_type	No	String	<p>Signature key type.</p> <ul style="list-style-type: none"> • hmac • basic • public_key • aes <p>To use a basic signature key, ensure that your gateway version supports it. If your gateway does not support this type of signature key, contact technical support to upgrade your gateway.</p> <p>To use a public_key signature key, ensure that the public_key feature has been configured for your gateway. For details, see "Appendix" > "Supported Features". If your gateway does not support this feature, contact technical support to enable it.</p> <p>To use an AES signature key, ensure that your gateway version supports it. If your gateway does not support this type of signature key, contact technical support to upgrade your gateway.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • hmac • basic • public_key • aes

Parameter	Mandatory	Type	Description
sign_key	No	String	<p>Signature key.</p> <ul style="list-style-type: none"> • hmac: The value contains 8 to 32 characters, including letters, digits, underscores (_), and hyphens (-). It must start with a letter or digit. If not specified, a key is automatically generated. • basic: The value contains 4 to 32 characters, including letters, digits, underscores (_), and hyphens (-). It must start with a letter. If not specified, a key is automatically generated. • public_key: The value contains 8 to 512 characters, including letters, digits, and special characters (_-+/=). It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a key is automatically generated. • aes: The value contains 16 characters if the aes-128-cfb algorithm is used, or 32 characters if the aes-256-cfb algorithm is used. Letters, digits, and special characters (_-!@#\$\$%+/=) are allowed. It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a key is automatically generated.

Parameter	Mandatory	Type	Description
sign_secret	No	String	<p>Signature secret.</p> <ul style="list-style-type: none"> • hmac: The value contains 16 to 64 characters. Letters, digits, and special characters (<code>_!@#\$\$%</code>) are allowed. It must start with a letter or digit. If not specified, a key is automatically generated. • basic: The value contains 8 to 64 characters. Letters, digits, and special characters (<code>_!@#\$\$%</code>) are allowed. It must start with a letter or digit. If not specified, a key is automatically generated. • public_key: The value can contain 16 to 2048 characters, including letters, digits, and special characters (<code>_!@#\$\$%+/=</code>). It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a key is automatically generated. • aes: The value contains 16 characters, including letters, digits, and special characters (<code>_!@#\$\$%+/=</code>). It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a key is automatically generated.
sign_algorithm	No	String	<p>Signature algorithm. Specify a signature algorithm only when using an AES signature key. By default, no algorithm is used.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • aes-128-cfb • aes-256-cfb

Response Parameters

Status code: 201

Table 3-343 Response body parameters

Parameter	Type	Description
name	String	Signature key name. It can contain letters, digits, and underscores(_) and must start with a letter. Minimum: 3 Maximum: 64
sign_type	String	Signature key type. <ul style="list-style-type: none"> ● hmac ● basic ● public_key ● aes <p>To use a basic signature key, ensure that your gateway version supports it. If your gateway does not support this type of signature key, contact technical support to upgrade your gateway.</p> <p>To use a public_key signature key, ensure that the public_key feature has been configured for your gateway. For details, see "Appendix" > "Supported Features". If your gateway does not support this feature, contact technical support to enable it.</p> <p>To use an AES signature key, ensure that your gateway version supports it. If your gateway does not support this type of signature key, contact technical support to upgrade your gateway.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> ● hmac ● basic ● public_key ● aes

Parameter	Type	Description
sign_key	String	<p>Signature key.</p> <ul style="list-style-type: none"> • hmac: The value contains 8 to 32 characters, including letters, digits, underscores (_), and hyphens (-). It must start with a letter or digit. If not specified, a key is automatically generated. • basic: The value contains 4 to 32 characters, including letters, digits, underscores (_), and hyphens (-). It must start with a letter. If not specified, a key is automatically generated. • public_key: The value contains 8 to 512 characters, including letters, digits, and special characters (_-+/=). It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a key is automatically generated. • aes: The value contains 16 characters if the aes-128-cfb algorithm is used, or 32 characters if the aes-256-cfb algorithm is used. Letters, digits, and special characters (_-!@#\$%+/=) are allowed. It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a key is automatically generated.
sign_secret	String	<p>Signature secret.</p> <ul style="list-style-type: none"> • hmac: The value contains 16 to 64 characters. Letters, digits, and special characters (_-!@#\$%) are allowed. It must start with a letter or digit. If not specified, a key is automatically generated. • basic: The value contains 8 to 64 characters. Letters, digits, and special characters (_-!@#\$%) are allowed. It must start with a letter or digit. If not specified, a key is automatically generated. • public_key: The value can contain 16 to 2048 characters, including letters, digits, and special characters (_-!@#\$%+/=). It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a key is automatically generated. • aes: The value contains 16 characters, including letters, digits, and special characters (_-!@#\$%+/=). It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a key is automatically generated.

Parameter	Type	Description
sign_algorithm	String	Signature algorithm. Specify a signature algorithm only when using an AES signature key. By default, no algorithm is used. Enumeration values: <ul style="list-style-type: none"> • aes-128-cfb • aes-256-cfb
update_time	String	Update time.
create_time	String	Creation time.
id	String	Signature key ID.

Status code: 400

Table 3-344 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-345 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-346 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-347 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 412

Table 3-348 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500

Table 3-349 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Create a signature key with a custom key and secret.

```
{
  "name" : "signature_demo",
  "sign_key" : "signkeysignkey",
  "sign_secret" : "sig*****ret"
}
```

Example Responses

Status code: 201

Created

```
{
  "sign_secret" : "sig*****ret",
  "update_time" : "2020-08-03T03:39:38.119032888Z",
  "create_time" : "2020-08-03T03:39:38.119032659Z",
  "name" : "signature_demo",
  "id" : "0b0e8f456b8742218af75f945307173c",
  "sign_key" : "signkeysignkey",
  "sign_type" : "hmac"
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2011",
  "error_msg" : "Invalid parameter value,parameterName:name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3030",
  "error_msg" : "The instance does not exist;id:f0fa1789-3b76-433b-a787-9892951c620ec"
}
```

Status code: 412

PreconditionFailed

```
{
  "error_code" : "APIG.3548",
  "error_msg" : "sign_type=public_key not supported by instance 6a29d4e9-69a0-412a-aabe-9898ec0903b0"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
201	Created
400	Bad Request
401	Unauthorized
403	Forbidden

Status Code	Description
404	Not Found
412	PreconditionFailed
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.6.2 Modifying a Signature Key

Function

This API is used to modify the information about a signature key.

Calling Method

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

URI

PUT /v2/{project_id}/apigw/instances/{instance_id}/signs/{sign_id}

Table 3-350 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
sign_id	Yes	String	Signature key ID.

Request Parameters

Table 3-351 Request header parameters

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

Table 3-352 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Signature key name. It can contain letters, digits, and underscores(_) and must start with a letter. Minimum: 3 Maximum: 64

Parameter	Mandatory	Type	Description
sign_type	No	String	<p>Signature key type.</p> <ul style="list-style-type: none"> • hmac • basic • public_key • aes <p>To use a basic signature key, ensure that your gateway version supports it. If your gateway does not support this type of signature key, contact technical support to upgrade your gateway.</p> <p>To use a public_key signature key, ensure that the public_key feature has been configured for your gateway. For details, see "Appendix" > "Supported Features". If your gateway does not support this feature, contact technical support to enable it.</p> <p>To use an AES signature key, ensure that your gateway version supports it. If your gateway does not support this type of signature key, contact technical support to upgrade your gateway.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • hmac • basic • public_key • aes

Parameter	Mandatory	Type	Description
sign_key	No	String	<p>Signature key.</p> <ul style="list-style-type: none"> • hmac: The value contains 8 to 32 characters, including letters, digits, underscores (_), and hyphens (-). It must start with a letter or digit. If not specified, a key is automatically generated. • basic: The value contains 4 to 32 characters, including letters, digits, underscores (_), and hyphens (-). It must start with a letter. If not specified, a key is automatically generated. • public_key: The value contains 8 to 512 characters, including letters, digits, and special characters (_-+/=). It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a key is automatically generated. • aes: The value contains 16 characters if the aes-128-cfb algorithm is used, or 32 characters if the aes-256-cfb algorithm is used. Letters, digits, and special characters (_-!@#%+/=) are allowed. It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a key is automatically generated.

Parameter	Mandatory	Type	Description
sign_secret	No	String	<p>Signature secret.</p> <ul style="list-style-type: none"> • hmac: The value contains 16 to 64 characters. Letters, digits, and special characters (<code>_!@#\$\$%</code>) are allowed. It must start with a letter or digit. If not specified, a key is automatically generated. • basic: The value contains 8 to 64 characters. Letters, digits, and special characters (<code>_!@#\$\$%</code>) are allowed. It must start with a letter or digit. If not specified, a key is automatically generated. • public_key: The value can contain 16 to 2048 characters, including letters, digits, and special characters (<code>_!@#\$\$%+/=</code>). It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a key is automatically generated. • aes: The value contains 16 characters, including letters, digits, and special characters (<code>_!@#\$\$%+/=</code>). It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a key is automatically generated.
sign_algorithm	No	String	<p>Signature algorithm. Specify a signature algorithm only when using an AES signature key. By default, no algorithm is used.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • aes-128-cfb • aes-256-cfb

Response Parameters

Status code: 200

Table 3-353 Response body parameters

Parameter	Type	Description
name	String	Signature key name. It can contain letters, digits, and underscores(_) and must start with a letter. Minimum: 3 Maximum: 64
sign_type	String	Signature key type. <ul style="list-style-type: none"> ● hmac ● basic ● public_key ● aes <p>To use a basic signature key, ensure that your gateway version supports it. If your gateway does not support this type of signature key, contact technical support to upgrade your gateway.</p> <p>To use a public_key signature key, ensure that the public_key feature has been configured for your gateway. For details, see "Appendix" > "Supported Features". If your gateway does not support this feature, contact technical support to enable it.</p> <p>To use an AES signature key, ensure that your gateway version supports it. If your gateway does not support this type of signature key, contact technical support to upgrade your gateway.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> ● hmac ● basic ● public_key ● aes

Parameter	Type	Description
sign_key	String	<p>Signature key.</p> <ul style="list-style-type: none"> • hmac: The value contains 8 to 32 characters, including letters, digits, underscores (_), and hyphens (-). It must start with a letter or digit. If not specified, a key is automatically generated. • basic: The value contains 4 to 32 characters, including letters, digits, underscores (_), and hyphens (-). It must start with a letter. If not specified, a key is automatically generated. • public_key: The value contains 8 to 512 characters, including letters, digits, and special characters (_-+/=). It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a key is automatically generated. • aes: The value contains 16 characters if the aes-128-cfb algorithm is used, or 32 characters if the aes-256-cfb algorithm is used. Letters, digits, and special characters (_-!@#\$\$%+/=) are allowed. It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a key is automatically generated.
sign_secret	String	<p>Signature secret.</p> <ul style="list-style-type: none"> • hmac: The value contains 16 to 64 characters. Letters, digits, and special characters (_-!@#\$\$%) are allowed. It must start with a letter or digit. If not specified, a key is automatically generated. • basic: The value contains 8 to 64 characters. Letters, digits, and special characters (_-!@#\$\$%) are allowed. It must start with a letter or digit. If not specified, a key is automatically generated. • public_key: The value can contain 16 to 2048 characters, including letters, digits, and special characters (_-!@#\$\$%+/=). It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a key is automatically generated. • aes: The value contains 16 characters, including letters, digits, and special characters (_-!@#\$\$%+/=). It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a key is automatically generated.

Parameter	Type	Description
sign_algorithm	String	Signature algorithm. Specify a signature algorithm only when using an AES signature key. By default, no algorithm is used. Enumeration values: <ul style="list-style-type: none"> • aes-128-cfb • aes-256-cfb
update_time	String	Update time.
create_time	String	Creation time.
id	String	Signature key ID.

Status code: 400

Table 3-354 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-355 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-356 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-357 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 412

Table 3-358 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.

Status code: 500

Table 3-359 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Modify the name of a specified signature key.

```
{
  "name" : "signature_demo"
}
```

Example Responses

Status code: 200

OK

```
{
  "sign_secret" : "dc0*****2b3",
  "update_time" : "2020-08-03T03:50:14.989785802Z",
  "create_time" : "2020-08-03T03:39:38Z",
  "name" : "signature_demo",
  "id" : "0b0e8f456b8742218af75f945307173c",
  "sign_key" : "a071a20d460a4f639a636c3d7e3d8163",
  "sign_type" : "hmac"
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2011",
  "error_msg" : "Invalid parameter value,parameterName:name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3017",
  "error_msg" : "Signature key 0b0e8f456b8742218af75f945307173c does not exist"
}
```

Status code: 412

PreconditionFailed

```
{
  "error_code" : "APIG.3548",
  "error_msg" : "sign_type=public_key not supported by instance 6a29d4e9-69a0-412a-aabe-9898ec0903b0"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden

Status Code	Description
404	Not Found
412	PreconditionFailed
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.6.3 Deleting a Signature Key

Function

This API is used to delete a signature key. This operation will invalidate the signature key and unbind it from the APIs to which it was bound.

Calling Method

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

URI

DELETE /v2/{project_id}/apigw/instances/{instance_id}/signs/{sign_id}

Table 3-360 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
sign_id	Yes	String	Signature key ID.

Request Parameters

Table 3-361 Request header parameters

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

Response Parameters

Status code: 401

Table 3-362 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-363 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-364 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-365 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3017",
  "error_msg" : "Signature key 0b0e8f456b8742218af75f945307173c does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
204	No Content
401	Unauthorized
403	Forbidden

Status Code	Description
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.6.4 Querying Signature Keys

Function

This API is used to query all the signature keys.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/signs

Table 3-366 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-367 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20
id	No	String	Signature key ID.
name	No	String	Signature key name.
precise_search	No	String	Parameter name (name) for exact matching.

Request Parameters

Table 3-368 Request header parameters

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

Response Parameters

Status code: 200

Table 3-369 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
signs	Array of SignatureWithBindNum objects	Signature key list.

Table 3-370 SignatureWithBindNum

Parameter	Type	Description
name	String	Signature key name. It can contain letters, digits, and underscores(_) and must start with a letter. Minimum: 3 Maximum: 64
sign_type	String	Signature key type. <ul style="list-style-type: none"> ● hmac ● basic ● public_key ● aes <p>To use a basic signature key, ensure that your gateway version supports it. If your gateway does not support this type of signature key, contact technical support to upgrade your gateway.</p> <p>To use a public_key signature key, ensure that the public_key feature has been configured for your gateway. For details, see "Appendix" > "Supported Features". If your gateway does not support this feature, contact technical support to enable it.</p> <p>To use an AES signature key, ensure that your gateway version supports it. If your gateway does not support this type of signature key, contact technical support to upgrade your gateway.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> ● hmac ● basic ● public_key ● aes

Parameter	Type	Description
sign_key	String	<p>Signature key.</p> <ul style="list-style-type: none"> • hmac: The value contains 8 to 32 characters, including letters, digits, underscores (_), and hyphens (-). It must start with a letter or digit. If not specified, a key is automatically generated. • basic: The value contains 4 to 32 characters, including letters, digits, underscores (_), and hyphens (-). It must start with a letter. If not specified, a key is automatically generated. • public_key: The value contains 8 to 512 characters, including letters, digits, and special characters (_-+/=). It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a key is automatically generated. • aes: The value contains 16 characters if the aes-128-cfb algorithm is used, or 32 characters if the aes-256-cfb algorithm is used. Letters, digits, and special characters (_-!@#\$\$%+/=) are allowed. It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a key is automatically generated.
sign_secret	String	<p>Signature secret.</p> <ul style="list-style-type: none"> • hmac: The value contains 16 to 64 characters. Letters, digits, and special characters (_-!@#\$\$%) are allowed. It must start with a letter or digit. If not specified, a key is automatically generated. • basic: The value contains 8 to 64 characters. Letters, digits, and special characters (_-!@#\$\$%) are allowed. It must start with a letter or digit. If not specified, a key is automatically generated. • public_key: The value can contain 16 to 2048 characters, including letters, digits, and special characters (_-!@#\$\$%+/=). It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a key is automatically generated. • aes: The value contains 16 characters, including letters, digits, and special characters (_-!@#\$\$%+/=). It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a key is automatically generated.

Parameter	Type	Description
sign_algorithm	String	Signature algorithm. Specify a signature algorithm only when using an AES signature key. By default, no algorithm is used. Enumeration values: <ul style="list-style-type: none"> • aes-128-cfb • aes-256-cfb
update_time	String	Update time.
create_time	String	Creation time.
id	String	Signature key ID.
bind_num	Integer	Number of bound APIs.
ldapi_bind_num	Integer	Number of custom backends bound. Currently, this parameter is not supported.

Status code: 400

Table 3-371 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-372 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-373 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Status code: 500

Table 3-374 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total" : 2,
  "size" : 2,
  "signs" : [ {
    "sign_secret" : "sig*****ret",
    "update_time" : "2018-02-07T02:00:27.964766Z",
    "create_time" : "2018-02-06T12:17:36Z",
    "name" : "signature_demo",
    "id" : "0b0e8f456b8742218af75f945307173c",
    "sign_key" : "signkeysignkey",
    "sign_type" : "hmac",
    "bind_num" : 0,
    "ldapi_bind_num" : 0
  }, {
    "sign_secret" : "9ce*****16a",
    "update_time" : "2020-07-30T03:56:58Z",
    "create_time" : "2020-07-30T03:56:58Z",
    "name" : "Signature_udlu",
    "id" : "9dc388382fba485aadd19f932303f4c9",
    "sign_key" : "ca50c5b670044c83b5b890a9a68a30d5",
    "sign_type" : "hmac",
    "bind_num" : 0,
    "ldapi_bind_num" : 0
  } ]
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.7 Binding/Unbinding Signature Keys

3.7.1 Binding a Signature Key

Function

A signature key takes effect only after being bound to an API.

When requesting the backend service, APIG uses the signature key to cryptographically sign requests. The backend service verifies the signature to identify request sources.

This API is used to bind a signature key to one or more published APIs. You can bind different signature keys to an API in different environments, but can bind only one signature key to the API in each environment.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances/{instance_id}/sign-bindings

Table 3-375 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-376 Request header parameters

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

Table 3-377 Request body parameters

Parameter	Mandatory	Type	Description
sign_id	Yes	String	Signature key ID.
publish_ids	Yes	Array of strings	API publication record ID.

Response Parameters

Status code: 201

Table 3-378 Response body parameters

Parameter	Type	Description
bindings	Array of SignApiBindingInfo objects	APIs bound to the signature key.

Table 3-379 SignApiBindingInfo

Parameter	Type	Description
publish_id	String	API publication record ID.
api_id	String	API ID.
group_name	String	Name of the API group to which the API belongs.
binding_time	String	Binding time.
env_id	String	ID of the environment in which the API has been published.
env_name	String	Name of the environment in which the API has been published.
api_type	Integer	API type.
api_name	String	API name.
id	String	Binding record ID.
api_remark	String	API description.
sign_id	String	Signature key ID.
sign_name	String	Signature key name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, and underscores (<code>_</code>) are allowed.
req_method	String	Request method. Enumeration values: <ul style="list-style-type: none"> • GET • POST • DELETE • PUT • PATCH • HEAD • OPTIONS • ANY

Parameter	Type	Description
sign_key	String	<p>Signature key.</p> <ul style="list-style-type: none"> • hmac: The value contains 8 to 32 characters, including letters, digits, underscores (_), and hyphens (-). It must start with a letter or digit. If not specified, a key is automatically generated. • basic: The value contains 4 to 32 characters, including letters, digits, underscores (_), and hyphens (-). It must start with a letter. If not specified, a key is automatically generated. • public_key: The value contains 8 to 512 characters, including letters, digits, and special characters (_-+/=). It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a key is automatically generated. • aes: The value contains 16 characters if the aes-128-cfb algorithm is used, or 32 characters if the aes-256-cfb algorithm is used. Letters, digits, and special characters (_-!@#\$%+/=) are allowed. It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a key is automatically generated.
sign_secret	String	<p>Signature secret.</p> <ul style="list-style-type: none"> • hmac: The value contains 16 to 64 characters. Letters, digits, and special characters (_-!@#\$%) are allowed. It must start with a letter or digit. If not specified, a value is automatically generated. • basic: The value contains 8 to 64 characters. Letters, digits, and special characters (_-!@#\$%) are allowed. It must start with a letter or digit. If not specified, a value is automatically generated. • public_key: The value contains 15 to 2048 characters, including letters, digits, and special characters (_-!@#\$%+/=). It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a value is automatically generated. • aes: The value contains 16 characters, including letters, digits, and special characters (_-!@#\$%+/=). It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a value is automatically generated.

Parameter	Type	Description
sign_type	String	<p>Signature key type.</p> <ul style="list-style-type: none"> • hmac • basic • public_key • aes <p>To use a basic signature key, ensure that your gateway version supports it. If your gateway does not support this type of signature key, contact technical support to upgrade your gateway.</p> <p>To use a public_key signature key, ensure that the public_key feature has been configured for your gateway. For details, see "Appendix" > "Supported Features". If your gateway does not support this feature, contact technical support to enable it.</p> <p>To use an AES signature key, ensure that your gateway version supports it. If your gateway does not support this type of signature key, contact technical support to upgrade your gateway.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • hmac • basic • public_key • aes

Status code: 400

Table 3-380 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-381 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-382 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-383 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-384 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Binding a signature key to a published API

```
{
  "sign_id" : "0b0e8f456b8742218af75f945307173c",
  "publish_ids" : [ "40e7162dc6b94bbbb1a60d2a24b1b0c" ]
}
```

Example Responses

Status code: 201

Created

```
{
  "bindings": [ {
    "api_id": "5f918d104dc84480a75166ba99efff21",
    "sign_secret": "dc0*****2b3",
    "group_name": "api_group_001",
    "sign_id": "0b0e8f456b8742218af75f945307173c",
    "sign_key": "a071a20d460a4f639a636c3d7e3d8163",
    "binding_time": "2020-08-03T04:00:11.638167852Z",
    "env_id": "DEFAULT_ENVIRONMENT_RELEASE_ID",
    "env_name": "RELEASE",
    "sign_name": "signature_demo",
    "api_type": 1,
    "api_name": "Api_http",
    "id": "25082bd52f74442bb1d273993d567938",
    "api_remark": "Web backend API"
  } ]
}
```

Status code: 400

Bad Request

```
{
  "error_code": "APIG.2012",
  "error_msg": "Invalid parameter value,parameterName:sign_id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code": "APIG.1002",
  "error_msg": "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code": "APIG.1005",
  "error_msg": "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code": "APIG.3017",
  "error_msg": "Signature key 0b0e8f456b8742218af75f945307173c does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code": "APIG.9999",
  "error_msg": "System error"
}
```

Status Codes

Status Code	Description
201	Created
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.7.2 Unbinding a Signature Key

Function

This API is used to unbind a signature key from an API.

Calling Method

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

URI

DELETE /v2/{project_id}/apigw/instances/{instance_id}/sign-bindings/{sign_bindings_id}

Table 3-385 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
sign_bindings_id	Yes	String	Signature key binding record ID.

Request Parameters

Table 3-386 Request header parameters

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

Response Parameters

Status code: 400

Table 3-387 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-388 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-389 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-390 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-391 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3018",
  "error_msg" : "The signature key binding record does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
204	No Content
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.7.3 Querying Signature Keys Bound to an API

Function

This API is used to query the signature keys that have been bound to a specified API. Only one signature key can be bound to an API in an environment.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/sign-bindings/binded-signs

Table 3-392 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-393 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20
api_id	Yes	String	API ID.
sign_id	No	String	Signature key ID.
sign_name	No	String	Signature key name.
env_id	No	String	Environment ID.

Request Parameters

Table 3-394 Request header parameters

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

Response Parameters

Status code: 200

Table 3-395 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
bindings	Array of SignApiBindingInfo objects	APIs bound to the signature key.

Table 3-396 SignApiBindingInfo

Parameter	Type	Description
publish_id	String	API publication record ID.
api_id	String	API ID.
group_name	String	Name of the API group to which the API belongs.
binding_time	String	Binding time.
env_id	String	ID of the environment in which the API has been published.
env_name	String	Name of the environment in which the API has been published.
api_type	Integer	API type.
api_name	String	API name.
id	String	Binding record ID.
api_remark	String	API description.
sign_id	String	Signature key ID.
sign_name	String	Signature key name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, and underscores (_) are allowed.

Parameter	Type	Description
req_method	String	<p>Request method.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • GET • POST • DELETE • PUT • PATCH • HEAD • OPTIONS • ANY
sign_key	String	<p>Signature key.</p> <ul style="list-style-type: none"> • hmac: The value contains 8 to 32 characters, including letters, digits, underscores (<code>_</code>), and hyphens (<code>-</code>). It must start with a letter or digit. If not specified, a key is automatically generated. • basic: The value contains 4 to 32 characters, including letters, digits, underscores (<code>_</code>), and hyphens (<code>-</code>). It must start with a letter. If not specified, a key is automatically generated. • public_key: The value contains 8 to 512 characters, including letters, digits, and special characters (<code>_-+/=</code>). It must start with a letter, digit, plus sign (<code>+</code>), or slash (<code>/</code>). If not specified, a key is automatically generated. • aes: The value contains 16 characters if the aes-128-cfb algorithm is used, or 32 characters if the aes-256-cfb algorithm is used. Letters, digits, and special characters (<code>_-!@#\$\$%+/=</code>) are allowed. It must start with a letter, digit, plus sign (<code>+</code>), or slash (<code>/</code>). If not specified, a key is automatically generated.

Parameter	Type	Description
sign_secret	String	<p>Signature secret.</p> <ul style="list-style-type: none"> ● hmac: The value contains 16 to 64 characters. Letters, digits, and special characters (<code>_!@#\$\$%</code>) are allowed. It must start with a letter or digit. If not specified, a value is automatically generated. ● basic: The value contains 8 to 64 characters. Letters, digits, and special characters (<code>_!@#\$\$%</code>) are allowed. It must start with a letter or digit. If not specified, a value is automatically generated. ● public_key: The value contains 15 to 2048 characters, including letters, digits, and special characters (<code>_!@#\$\$%+/=</code>). It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a value is automatically generated. ● aes: The value contains 16 characters, including letters, digits, and special characters (<code>_!@#\$\$%+/=</code>). It must start with a letter, digit, plus sign (+), or slash (/). If not specified, a value is automatically generated.

Parameter	Type	Description
sign_type	String	<p>Signature key type.</p> <ul style="list-style-type: none"> • hmac • basic • public_key • aes <p>To use a basic signature key, ensure that your gateway version supports it. If your gateway does not support this type of signature key, contact technical support to upgrade your gateway.</p> <p>To use a public_key signature key, ensure that the public_key feature has been configured for your gateway. For details, see "Appendix" > "Supported Features". If your gateway does not support this feature, contact technical support to enable it.</p> <p>To use an AES signature key, ensure that your gateway version supports it. If your gateway does not support this type of signature key, contact technical support to upgrade your gateway.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • hmac • basic • public_key • aes

Status code: 400

Table 3-397 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-398 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-399 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-400 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-401 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total" : 1,
```

```
"size" : 1,
"bindings" : [ {
  "api_id" : "5f918d104dc84480a75166ba99efff21",
  "group_name" : "api_group_001",
  "binding_time" : "2020-08-03T04:00:11Z",
  "env_id" : "DEFAULT_ENVIRONMENT_RELEASE_ID",
  "env_name" : "RELEASE",
  "sign_id" : "0b0e8f456b8742218af75f945307173c",
  "sign_name" : "signature_demo",
  "sign_key" : "a071a20d460a4f639a636c3d7e3d8163",
  "sign_secret" : "dc0*****2b3",
  "api_type" : 1,
  "api_name" : "Api_http",
  "id" : "25082bd52f74442bb1d273993d567938",
  "api_remark" : "Web backend API"
} ]
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:api_name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3002",
  "error_msg" : "API 5f918d104dc84480a75166ba99efff21 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.7.4 Querying APIs Not Bound with a Signature Key

Function

This API is used to query the APIs to which a signature key has not been bound. Only published APIs will be displayed.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/sign-bindings/unbinded-apis

Table 3-402 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-403 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20
sign_id	Yes	String	Signature key ID.
env_id	No	String	Environment ID.
api_id	No	String	API ID.
api_name	No	String	API name.
group_id	No	String	API group ID.

Request Parameters

Table 3-404 Request header parameters

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

Response Parameters

Status code: **200**

Table 3-405 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
apis	Array of ApiForSign objects	API list.

Table 3-406 ApiForSign

Parameter	Type	Description
auth_type	String	API authentication mode.
run_env_name	String	Name of the environment in which the API has been published.
group_name	String	Name of the API group to which the API belongs.
publish_id	String	Publication record ID.
group_id	String	ID of the API group to which the API belongs.
name	String	API name.
remark	String	API description.
run_env_id	String	ID of the environment in which the API has been published.
id	String	API ID.
req_uri	String	API request address.
type	Integer	API type.
signature_name	String	Name of the signature key bound to the API.

Parameter	Type	Description
req_method	String	Request method. Enumeration values: <ul style="list-style-type: none"> • GET • POST • DELETE • PUT • PATCH • HEAD • OPTIONS • ANY

Status code: 400

Table 3-407 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-408 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-409 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-410 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-411 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total": 1,
  "size": 1,
  "apis": [ {
    "run_env_name": "RELEASE",
    "group_name": "api_group_001",
    "remark": "Mock backend API",
    "publish_id": "9f27d1dc4f4242a9abf88e563dbfc33d",
    "group_id": "c77f5e81d9cb4424bf704ef2b0ac7600",
    "name": "Api_mock",
    "run_env_id": "DEFAULT_ENVIRONMENT_RELEASE_ID",
    "id": "3a955b791bd24b1c9cd94c745f8d1aad",
    "type": 1,
    "auth_type": "IAM",
    "req_uri": "/test/mock"
  } ]
}
```

Status code: 400

Bad Request

```
{
  "error_code": "APIG.2012",
  "error_msg": "Invalid parameter value,parameterName:api_name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{  
  "error_code" : "APIG.1002",  
  "error_msg" : "Incorrect token or token resolution failed"  
}
```

Status code: 403

Forbidden

```
{  
  "error_code" : "APIG.1005",  
  "error_msg" : "No permissions to request this method"  
}
```

Status code: 404

Not Found

```
{  
  "error_code" : "APIG.3017",  
  "error_msg" : "Signature key 0b0e8f456b8742218af75f945307173c does not exist"  
}
```

Status code: 500

Internal Server Error

```
{  
  "error_code" : "APIG.9999",  
  "error_msg" : "System error"  
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.7.5 Querying APIs Bound with a Signature Key

Function

This API is used to query the APIs to which a signature key has been bound.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/sign-bindings/binded-apis

Table 3-412 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-413 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20
sign_id	Yes	String	Signature key ID.
env_id	No	String	Environment ID.
api_id	No	String	API ID.
api_name	No	String	API name.
group_id	No	String	API group ID.

Request Parameters

Table 3-414 Request header parameters

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

Response Parameters

Status code: 200

Table 3-415 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
bindings	Array of SignApiBindingBase objects	List of signature key binding records.

Table 3-416 SignApiBindingBase

Parameter	Type	Description
publish_id	String	API publication record ID.
api_id	String	API ID.
group_name	String	Name of the API group to which the API belongs.
binding_time	String	Binding time.
env_id	String	ID of the environment in which the API has been published.
env_name	String	Name of the environment in which the API has been published.
api_type	Integer	API type.
api_name	String	API name.

Parameter	Type	Description
id	String	Binding record ID.
api_remark	String	API description.
sign_id	String	Signature key ID.
sign_name	String	Signature key name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, and underscores (_) are allowed.
req_method	String	Request method. Enumeration values: <ul style="list-style-type: none"> • GET • POST • DELETE • PUT • PATCH • HEAD • OPTIONS • ANY

Status code: 400

Table 3-417 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-418 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-419 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-420 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-421 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total": 1,
  "size": 1,
  "bindings": [ {
    "api_id": "5f918d104dc84480a75166ba99efff21",
    "group_name": "api_group_001",
    "binding_time": "2020-08-03T04:00:11Z",
    "env_id": "DEFAULT_ENVIRONMENT_RELEASE_ID",
    "env_name": "RELEASE",
    "sign_name": "signature_demo",
    "api_type": 1,
    "api_name": "Api_http",
    "id": "25082bd52f74442bb1d273993d567938",
    "api_remark": "Web backend API",
    "publish_id": "40e7162dc6b94bbbbb1a60d2a24b1b0c"
  }
]
```

```
}}
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:api_name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3017",
  "error_msg" : "Signature key 0b0e8f456b8742218af75f945307173c does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.8 Binding/Unbinding Request Throttling Policies

3.8.1 Binding a Request Throttling Policy

Function

The request throttling policy bound to an API will control access of all users to the API.

If the number of API calls within a specified period reaches the limit, subsequent access will be rejected, protecting the backend API from abnormal traffic and ensuring stable service running.

This API is used to bind a request throttling policy to an API that has been published in an environment. You can bind different request throttling policies to an API in different environments, but can bind only one request throttling policy to the API in each environment.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances/{instance_id}/throttle-bindings

Table 3-422 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-423 Request header parameters

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

Table 3-424 Request body parameters

Parameter	Mandatory	Type	Description
strategy_id	Yes	String	Request throttling policy ID. Minimum: 1 Maximum: 65
publish_ids	Yes	Array of strings	API publication record ID.

Response Parameters

Status code: 201

Table 3-425 Response body parameters

Parameter	Type	Description
throttle_appl s	Array of ThrottleApiBinding objects	Request throttling policy binding records.

Table 3-426 ThrottleApiBinding

Parameter	Type	Description
publish_id	String	API publication record ID.

Parameter	Type	Description
scope	Integer	Scope of the policy. <ul style="list-style-type: none"> • 1: the API • 2: a user • 3: an app Currently, only "1" is supported. Enumeration values: <ul style="list-style-type: none"> • 1 • 2 • 3
strategy_id	String	Request throttling policy ID.
apply_time	String	Binding time.
id	String	Binding record ID.

Status code: 401

Table 3-427 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-428 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-429 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Status code: 500

Table 3-430 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Binding a request throttling policy to an API

```
{
  "publish_ids" : [ "40e7162dc6b94bbbb1a60d2a24b1b0c" ],
  "strategy_id" : "3437448ad06f4e0c91a224183116e965"
}
```

Example Responses

Status code: 201

Created

```
{
  "throttle_applys" : [ {
    "publish_id" : "40e7162dc6b94bbbb1a60d2a24b1b0c",
    "scope" : 1,
    "strategy_id" : "3437448ad06f4e0c91a224183116e965",
    "apply_time" : "2020-08-03T12:25:52.257613934Z",
    "id" : "3e06ac135e18477e918060d3c59d6f6a"
  } ]
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3005",
  "error_msg" : "Request throttling policy 3437448ad06f4e0c91a224183116e965 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
201	Created
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.8.2 Unbinding a Request Throttling Policy

Function

This API is used to unbind a request throttling policy from an API.

Calling Method

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

URI

```
DELETE /v2/{project_id}/apigw/instances/{instance_id}/throttle-bindings/
{throttle_binding_id}
```

Table 3-431 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
throttle_binding_id	Yes	String	ID of a request throttling policy binding record.

Request Parameters

Table 3-432 Request header parameters

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

Response Parameters

Status code: 400

Table 3-433 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-434 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-435 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-436 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-437 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3012",
  "error_msg" : "The request throttling policy binding record does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
204	No Content
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.8.3 Querying APIs Bound with a Request Throttling Policy

Function

This API is used to query the APIs to which a specified request throttling policy has been bound.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/throttle-bindings/binded-apis

Table 3-438 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-439 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20
throttle_id	Yes	String	Request throttling policy ID.
env_id	No	String	Environment ID.
group_id	No	String	API group ID.
api_id	No	String	API ID.
api_name	No	String	API name.

Request Parameters

Table 3-440 Request header parameters

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

Response Parameters

Status code: 200

Table 3-441 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
apis	Array of ApiForThrottling objects	API list.

Table 3-442 ApiForThrottle

Parameter	Type	Description
auth_type	String	API authentication mode.
group_name	String	Name of the API group to which the API belongs.
publish_id	String	API publication record ID.
throttle_apply_id	String	ID of a request throttling policy binding record.
apply_time	String	Binding time.
remark	String	API description.
run_env_id	String	ID of the environment in which the API has been published.
type	Integer	API type.

Parameter	Type	Description
throttle_name	String	Name of the request throttling policy bound to the API.
req_uri	String	Access address of the API.
run_env_name	String	Name of the environment in which the API has been published.
group_id	String	ID of the API group to which the API belongs.
name	String	API name.
id	String	API ID.
req_method	String	Request method. Enumeration values: <ul style="list-style-type: none"> • GET • POST • DELETE • PUT • PATCH • HEAD • OPTIONS • ANY

Status code: 400

Table 3-443 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-444 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-445 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-446 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-447 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total" : 1,
  "size" : 1,
  "apis" : [ {
    "run_env_name" : "RELEASE",
    "group_name" : "api_group_001",
    "publish_id" : "40e7162dc6b94bbbb1a60d2a24b1b0c",
    "group_id" : "c77f5e81d9cb4424bf704ef2b0ac7600",
    "throttle_apply_id" : "3e06ac135e18477e918060d3c59d6f6a",
    "name" : "Api_http",
    "apply_time" : "2020-08-03T12:25:52Z",
    "remark" : "Web backend API",
    "run_env_id" : "DEFAULT_ENVIRONMENT_RELEASE_ID",
```

```

    "id" : "5f918d104dc84480a75166ba99efff21",
    "type" : 1,
    "throttle_name" : "throttle_demo",
    "auth_type" : "APP",
    "req_uri" : "/test/http"
  } ]
}

```

Status code: 400

Bad Request

```

{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:throttle_id. Please refer to the support documentation"
}

```

Status code: 401

Unauthorized

```

{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}

```

Status code: 403

Forbidden

```

{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}

```

Status code: 404

Not Found

```

{
  "error_code" : "APIG.3005",
  "error_msg" : "Request throttling policy 3437448ad06f4e0c91a224183116e965 does not exist"
}

```

Status code: 500

Internal Server Error

```

{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}

```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden

Status Code	Description
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.8.4 Querying APIs Not Bound with a Request Throttling Policy

Function

This API is used to query the self-developed APIs to which a request throttling policy has not been bound. Only published APIs will be displayed.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/throttle-bindings/unbound-apis

Table 3-448 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-449 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20
throttle_id	Yes	String	Request throttling policy ID.
env_id	No	String	Environment ID.
group_id	No	String	API group ID.
api_id	No	String	API ID.
api_name	No	String	API name.

Request Parameters

Table 3-450 Request header parameters

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

Response Parameters

Status code: **200**

Table 3-451 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
apis	Array of ApiForThrottle objects	API list.

Table 3-452 ApiForThrottle

Parameter	Type	Description
auth_type	String	API authentication mode.
group_name	String	Name of the API group to which the API belongs.
publish_id	String	API publication record ID.
throttle_apply_id	String	ID of a request throttling policy binding record.
apply_time	String	Binding time.
remark	String	API description.
run_env_id	String	ID of the environment in which the API has been published.
type	Integer	API type.
throttle_name	String	Name of the request throttling policy bound to the API.
req_uri	String	Access address of the API.
run_env_name	String	Name of the environment in which the API has been published.
group_id	String	ID of the API group to which the API belongs.
name	String	API name.
id	String	API ID.

Parameter	Type	Description
req_method	String	Request method. Enumeration values: <ul style="list-style-type: none"> • GET • POST • DELETE • PUT • PATCH • HEAD • OPTIONS • ANY

Status code: 400

Table 3-453 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-454 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-455 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-456 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-457 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total": 2,
  "size": 2,
  "apis": [ {
    "run_env_name": "RELEASE",
    "group_name": "api_group_001",
    "publish_id": "9f27d1dc4f4242a9abf88e563dbfc33d",
    "group_id": "c77f5e81d9cb4424bf704ef2b0ac7600",
    "name": "Api_mock",
    "remark": "Mock backend API",
    "run_env_id": "DEFAULT_ENVIRONMENT_RELEASE_ID",
    "id": "3a955b791bd24b1c9cd94c745f8d1aad",
    "type": 1,
    "auth_type": "IAM",
    "req_uri": "/test/mock"
  }, {
    "run_env_name": "RELEASE",
    "group_name": "APIGroup_d00511069",
    "publish_id": "0c613568c8644a1b92172156f77a5759",
    "group_id": "d7d0b9a54469424f942e16a6b6026936",
    "name": "API_nevj",
    "run_env_id": "DEFAULT_ENVIRONMENT_RELEASE_ID",
    "id": "9e07bc00a1864ab4aafd4a23d19dd1c2",
    "type": 1,
    "auth_type": "APP",
    "req_uri": "/fdasf"
  } ]
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:throttle_id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3005",
  "error_msg" : "Request throttling policy 3437448ad06f4e0c91a224183116e965 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.8.5 Querying Request Throttling Policies Bound to an API

Function

This API is used to query the request throttling policies that have been bound to an API. Only one request throttling policy can be bound to an API in an environment.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/throttle-bindings/binded-throttles

Table 3-458 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-459 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20
api_id	Yes	String	API ID.
throttle_id	No	String	Request throttling policy ID.
throttle_name	No	String	Request throttling policy name.
env_id	No	String	Environment ID.

Request Parameters

Table 3-460 Request header parameters

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

Response Parameters

Status code: 200

Table 3-461 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.

Parameter	Type	Description
throttles	Array of ThrottleForApi objects	Request throttling policy list.

Table 3-462 ThrottleForApi

Parameter	Type	Description
app_call_limits	Integer	Maximum number of times the API can be accessed by an app within the same period. The value of this parameter cannot exceed the user call limit. The maximum value is 2,147,483,647. Enter a positive integer.
name	String	Request throttling policy name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, and underscores (_) are allowed.
time_unit	String	Time unit for limiting the number of API calls. Enumeration values: <ul style="list-style-type: none"> • SECOND • MINUTE • HOURL • DAY
remark	String	Description of the request throttling policy, which can contain a maximum of 255 characters.
api_call_limits	Integer	Maximum number of times an API can be accessed within a specified period. The value of this parameter cannot exceed the default limit 200 TPS. You can change the default limit to meet service requirements. The maximum value is 2,147,483,647. Enter a positive integer.
type	Integer	Type of the request throttling policy. <ul style="list-style-type: none"> • 1: API-based, limiting the maximum number of times a single API bound to the policy can be called within the specified period. • 2: API-shared, limiting the maximum number of times all APIs bound to the policy can be called within the specified period. Enumeration values: <ul style="list-style-type: none"> • 1 • 2

Parameter	Type	Description
enable_adaptive_control	String	Indicates whether to enable dynamic request throttling. <ul style="list-style-type: none"> • TRUE • FALSE Currently, this parameter is not supported.
user_call_limits	Integer	Maximum number of times the API can be accessed by a user within the same period. The value of this parameter cannot exceed the Max. API Requests. The maximum value is 2,147,483,647. Enter a positive integer.
time_interval	Integer	Period of time for limiting the number of API calls. This parameter applies with each API call limit. The maximum value is 2,147,483,647. Enter a positive integer.
ip_call_limits	Integer	Maximum number of times the API can be accessed by an IP address within the same period. The value of this parameter cannot exceed the API call limit. The maximum value is 2,147,483,647. Enter a positive integer.
id	String	Request throttling policy ID.
bind_num	Integer	Number of APIs to which the request throttling policy has been bound.
is_included_special_throttle	Integer	Indicates whether an excluded request throttling configuration has been created. <ul style="list-style-type: none"> • 1: yes • 2: no Enumeration values: <ul style="list-style-type: none"> • 1 • 2
create_time	String	Creation time.
env_name	String	Environment in which the request throttling policy takes effect.
bind_id	String	Policy binding record ID.
bind_time	String	Time when the policy is bound to the API.

Status code: 400

Table 3-463 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-464 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-465 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-466 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-467 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total" : 1,
  "size" : 1,
  "throttles" : [ {
    "id" : "3437448ad06f4e0c91a224183116e965",
    "name" : "throttle_demo",
    "api_call_limits" : 800,
    "user_call_limits" : 500,
    "app_call_limits" : 300,
    "ip_call_limits" : 600,
    "time_interval" : 1,
    "time_unit" : "SECOND",
    "create_time" : "2020-07-31T08:44:02Z",
    "remark" : "Total: 800 calls/second; user: 500 calls/second; app: 300 calls/second; IP address: 600 calls/second",
    "is_inclu_special_throttle" : 2,
    "env_name" : "RELEASE",
    "type" : 1,
    "bind_id" : "3e06ac135e18477e918060d3c59d6f6a",
    "bind_time" : "2020-08-03T12:25:52Z",
    "bind_num" : 0,
    "enable_adaptive_control" : "FALSE"
  } ]
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:throttle_name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3002",
  "error_msg" : "API 5f918d104dc84480a75166ba99efff21 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.8.6 Unbinding Request Throttling Policies

Function

This API is used to unbind request throttling policies from APIs.

Calling Method

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

URI

PUT /v2/{project_id}/apigw/instances/{instance_id}/throttle-bindings

Table 3-468 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-469 Query Parameters

Parameter	Mandatory	Type	Description
action	Yes	String	The value must be delete.

Request Parameters

Table 3-470 Request header parameters

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

Table 3-471 Request body parameters

Parameter	Mandatory	Type	Description
throttle_bindings	No	Array of strings	IDs of the request throttling policy binding records to be canceled.

Response Parameters

Status code: 200

Table 3-472 Response body parameters

Parameter	Type	Description
success_count	Integer	Number of request throttling policies that have been successfully unbound.
failure	Array of ThrottleBindingBatchFailure objects	Error message and request throttling policies that fail to be unbound.

Table 3-473 ThrottleBindingBatchFailure

Parameter	Type	Description
bind_id	String	ID of a request throttling policy binding record that fails to be canceled.
error_code	String	Error code.
error_msg	String	Error message.
api_id	String	ID of an API from which unbinding fails.
api_name	String	Name of the API from which unbinding fails.

Status code: 400

Table 3-474 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-475 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-476 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-477 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Unbinding request throttling policies from APIs

```
{
  "throttle_bindings" : [ "6a6a75b425df416cbdc7821da30be8d", "b11e5970f732440d6ea647580647d57f" ]
}
```

Example Responses

Status code: 200

OK

```
{
  "failure" : [ {
    "bind_id" : "b11e5970f732440d6ea647580647d57f",
    "error_code" : "APIG.3012",
    "error_msg" : "The request throttling policy binding record does not exist"
  } ],
  "success_count" : 1
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2011",
  "error_msg" : "parameter action should be \\\"delete\\\""
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
500	Internal Server Error

Error CodesSee [Error Codes](#).

3.9 Excluded Request Throttling Configuration

3.9.1 Creating an Excluded Request Throttling Configuration

Function

A request throttling policy controls the maximum number of times an API can be accessed within a specified period and the maximum numbers of times the API can be accessed by a tenant or an app within the same period.

If necessary, you can create an excluded request throttling configuration to specify the threshold of API calls for a specific app. For example, if you set the API call threshold for all apps to 500 calls/minute, you can specify the API call threshold of app 1 as 800 calls/minute.

You can add excluded apps or tenants to a request throttling policy.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances/{instance_id}/throttles/{throttle_id}/throttle-specials

Table 3-478 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
throttle_id	Yes	String	Request throttling policy ID.

Request Parameters

Table 3-479 Request header parameters

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

Table 3-480 Request body parameters

Parameter	Mandatory	Type	Description
call_limits	Yes	Integer	Maximum number of times an excluded object can access an API within the throttling period.
object_id	Yes	String	Excluded app ID or account ID.

Parameter	Mandatory	Type	Description
object_type	Yes	String	Excluded object type. Enumeration values: <ul style="list-style-type: none"> • APP • USER

Response Parameters

Status code: 201

Table 3-481 Response body parameters

Parameter	Type	Description
id	String	Excluded configuration ID.
call_limits	Integer	Maximum number of times an excluded object can access an API within the throttling period.
apply_time	String	Throttling period.
app_name	String	App name.
app_id	String	App ID.
object_id	String	ID of an object specified in the excluded configuration.
object_type	String	Excluded object type, which can be APP or USER.
object_name	String	Name of an app or a tenant to which the excluded configuration applies.
throttle_id	String	Request throttling policy ID.

Status code: 400

Table 3-482 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-483 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-484 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-485 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-486 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Adding an excluded app to a request throttling policy with threshold 150

```
{
  "call_limits": 150,
  "object_id": "356de8eb7a8742168586e5daf5339965",
  "object_type": "APP"
}
```

Example Responses

Status code: 201

Created

```
{
  "call_limits" : 150,
  "app_name" : "app_demo",
  "object_name" : "app_demo",
  "object_id" : "356de8eb7a8742168586e5daf5339965",
  "throttle_id" : "3437448ad06f4e0c91a224183116e965",
  "apply_time" : "2020-08-04T02:40:56.717710961Z",
  "id" : "a3e9ff8db55544ed9db91d8b048770c0",
  "app_id" : "356de8eb7a8742168586e5daf5339965",
  "object_type" : "APP"
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2003",
  "error_msg" : "The parameter value is too large,parameterName:call_limits. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3004",
  "error_msg" : "App 356de8eb7a8742168586e5daf5339965 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
201	Created
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.9.2 Modifying an Excluded Request Throttling Configuration

Function

This API is used to modify an excluded configuration of a request throttling policy.

Calling Method

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

URI

PUT /v2/{project_id}/apigw/instances/{instance_id}/throttles/{throttle_id}/throttle-specials/{strategy_id}

Table 3-487 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
throttle_id	Yes	String	Request throttling policy ID.
strategy_id	Yes	String	Excluded configuration ID.

Request Parameters

Table 3-488 Request header parameters

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

Table 3-489 Request body parameters

Parameter	Mandatory	Type	Description
call_limits	Yes	Long	Maximum number of times an excluded object can access an API within the throttling period.

Response Parameters

Status code: 200

Table 3-490 Response body parameters

Parameter	Type	Description
id	String	Excluded configuration ID.
call_limits	Integer	Maximum number of times an excluded object can access an API within the throttling period.
apply_time	String	Throttling period.
app_name	String	App name.
app_id	String	App ID.
object_id	String	ID of an object specified in the excluded configuration.
object_type	String	Excluded object type, which can be APP or USER.
object_name	String	Name of an app or a tenant to which the excluded configuration applies.
throttle_id	String	Request throttling policy ID.

Status code: 400

Table 3-491 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-492 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-493 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-494 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-495 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Example Requests

Modifying an excluded configuration of a request throttling policy

```
{
  "call_limits" : 200
}
```

Example Responses

Status code: 200

OK

```
{
  "call_limits" : 200,
  "app_name" : "app_demo",
  "object_name" : "app_demo",
  "object_id" : "356de8eb7a8742168586e5daf5339965",
  "throttle_id" : "3437448ad06f4e0c91a224183116e965",
  "apply_time" : "2020-08-04T02:40:56Z",
  "id" : "a3e9ff8db55544ed9db91d8b048770c0",
  "app_id" : "356de8eb7a8742168586e5daf5339965",
  "object_type" : "APP"
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2003",
  "error_msg" : "The parameter value is too large,parameterName:call_limits. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3013",
}
```

```
"error_msg" : "Excluded request throttling configuration a3e9ff8db55544ed9db91d8b048770c0 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.9.3 Deleting an Excluded Request Throttling Configuration

Function

This API is used to delete an excluded configuration of a request throttling policy.

Calling Method

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

URI

DELETE /v2/{project_id}/apigw/instances/{instance_id}/throttles/{throttle_id}/throttle-specials/{strategy_id}

Table 3-496 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
throttle_id	Yes	String	Request throttling policy ID.
strategy_id	Yes	String	Excluded configuration ID.

Request Parameters

Table 3-497 Request header parameters

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

Response Parameters

Status code: 400

Table 3-498 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-499 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Status code: 403

Table 3-500 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-501 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-502 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{  
  "error_code" : "APIG.1002",  
  "error_msg" : "Incorrect token or token resolution failed"  
}
```

Status code: 403

Forbidden

```
{  
  "error_code" : "APIG.1005",  
  "error_msg" : "No permissions to request this method"  
}
```

Status code: 404

Not Found

```
{  
  "error_code" : "APIG.3013",  
  "error_msg" : "Excluded request throttling configuration a3e9ff8db55544ed9db91d8b048770c0 does not exist"  
}
```

Status code: 500

Internal Server Error

```
{  
  "error_code" : "APIG.9999",  
  "error_msg" : "System error"  
}
```

Status Codes

Status Code	Description
204	No Content
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.9.4 Querying Excluded Request Throttling Configurations

Function

This API is used to query all excluded configurations of a request throttling policy.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/throttles/{throttle_id}/throttle-specials

Table 3-503 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
throttle_id	Yes	String	Request throttling policy ID.

Table 3-504 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20

Parameter	Mandatory	Type	Description
object_type	No	String	Object type, which can be APP or USER.
app_name	No	String	Name of an excluded app.
user	No	String	Name of an excluded user.

Request Parameters

Table 3-505 Request header parameters

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

Response Parameters

Status code: 200

Table 3-506 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
throttle_specials	Array of ThrottleSpecialInfo objects	Excluded configuration list.

Table 3-507 ThrottleSpecialInfo

Parameter	Type	Description
id	String	Excluded configuration ID.
call_limits	Integer	Maximum number of times an excluded object can access an API within the throttling period.
apply_time	String	Throttling period.

Parameter	Type	Description
app_name	String	App name.
app_id	String	App ID.
object_id	String	ID of an object specified in the excluded configuration.
object_type	String	Excluded object type, which can be APP or USER.
object_name	String	Name of an app or a tenant to which the excluded configuration applies.
throttle_id	String	Request throttling policy ID.

Status code: 400

Table 3-508 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-509 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-510 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-511 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-512 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total" : 1,
  "size" : 1,
  "throttle_specials" : [ {
    "call_limits" : 200,
    "app_name" : "app_demo",
    "object_name" : "app_demo",
    "object_id" : "356de8eb7a8742168586e5daf5339965",
    "throttle_id" : "3437448ad06f4e0c91a224183116e965",
    "apply_time" : "2020-08-04T02:40:56Z",
    "id" : "a3e9ff8db55544ed9db91d8b048770c0",
    "app_id" : "356de8eb7a8742168586e5daf5339965",
    "object_type" : "APP"
  } ]
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:app_name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
```

```
{
  "error_msg": "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code": "APIG.1005",
  "error_msg": "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code": "APIG.3005",
  "error_msg": "Request throttling policy 3437448ad06f4e0c91a224183116e965 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code": "APIG.9999",
  "error_msg": "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.10 App Authorization Management

3.10.1 Authorizing Apps

Function

An app cannot access any APIs after being created. To access an API in a specific environment, bind the app to the API in the environment.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances/{instance_id}/app-auths

Table 3-513 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-514 Request header parameters

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

Table 3-515 Request body parameters

Parameter	Mandatory	Type	Description
env_id	Yes	String	ID of the environment in which the apps will be authorized.

Parameter	Mandatory	Type	Description
app_ids	Yes	Array of strings	App IDs.
api_ids	Yes	Array of strings	API list.

Response Parameters

Status code: 201

Table 3-516 Response body parameters

Parameter	Type	Description
auths	Array of ApiAuthRelations objects	App authorization records.

Table 3-517 ApiAuthRelations

Parameter	Type	Description
api_id	String	API ID.
auth_result	AuthResult object	Authorization result.
auth_time	String	Authorization time.
id	String	Authorization record ID.
app_id	String	App ID.
auth_role	String	Authorizer. <ul style="list-style-type: none"> • PROVIDER: API provider • CONSUMER: API user Enumeration values: <ul style="list-style-type: none"> • PROVIDER • CONSUMER

Parameter	Type	Description
auth_tunnel	String	Authorization channel type. <ul style="list-style-type: none"> • NORMAL: normal channel • GREEN: green channel The default value is NORMAL. This parameter is not supported currently. Enumeration values: <ul style="list-style-type: none"> • NORMAL • GREEN
auth_whitelist	Array of strings	Whitelist for the green channel.
auth_blacklist	Array of strings	Blacklist for the green channel.
visit_params	String	Access parameters.

Table 3-518 AuthResult

Parameter	Type	Description
status	String	Authorization result. <ul style="list-style-type: none"> • SUCCESS • SKIPPED • FAILED Enumeration values: <ul style="list-style-type: none"> • SUCCESS • SKIPPED • FAILED
error_msg	String	Error message.
error_code	String	Error code.
api_name	String	Name of the API for which authorization fails.
app_name	String	Name of the app that fails to be authorized.

Status code: 400

Table 3-519 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Status code: 401

Table 3-520 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-521 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-522 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-523 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Authorizing an app to call an API

```
{
  "env_id" : "DEFAULT_ENVIRONMENT_RELEASE_ID",
  "app_ids" : [ "356de8eb7a8742168586e5daf5339965" ],
  "api_ids" : [ "5f918d104dc84480a75166ba99efff21" ]
}
```

Example Responses

Status code: 201

Created

```
{
  "auths" : [ {
    "api_id" : "5f918d104dc84480a75166ba99efff21",
    "auth_result" : {
      "status" : "SUCCESS"
    },
    "auth_time" : "22020-08-04T04:02:22.482227344Z",
    "id" : "dd29b33ae4394e3b924b582c6b40880b",
    "app_id" : "356de8eb7a8742168586e5daf5339965",
    "auth_role" : "PROVIDER",
    "auth_tunnel" : "NORMAL"
  } ]
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2011",
  "error_msg" : "Invalid parameter value,parameterName:api_ids. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3004",
  "error_msg" : "App 356de8eb7a8742168586e5daf5339965 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
201	Created
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.10.2 Canceling Authorization

Function

This API is used to cancel the authorization of an app for accessing an API. After this operation, the app can no longer call the API.

Calling Method

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

URI

DELETE /v2/{project_id}/apigw/instances/{instance_id}/app-auths/{app_auth_id}

Table 3-524 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
app_auth_id	Yes	String	Authorization record ID.

Request Parameters

Table 3-525 Request header parameters

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

Response Parameters

Status code: 400

Table 3-526 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-527 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-528 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-529 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-530 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3009",
  "error_msg" : "The app authorization record does not exist,id:dd29b33ae4394e3b924b582c6b40880b"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
204	No Content
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.10.3 Querying APIs Bound with an App

Function

This API is used to query the APIs to which a specified app has been bound.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/app-auths/binded-apis

Table 3-531 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-532 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20
app_id	Yes	String	App ID.
api_id	No	String	API ID.
api_name	No	String	API name.
group_id	No	String	API group ID.
group_name	No	String	API group name.
env_id	No	String	ID of the environment in which the app has been authorized.

Request Parameters

Table 3-533 Request header parameters

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

Response Parameters

Status code: 200

Table 3-534 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
auths	Array of ApiAuthInfo objects	API list.

Table 3-535 ApiAuthInfo

Parameter	Type	Description
id	String	Authorization record ID.
api_id	String	API ID.
api_name	String	API name.
group_name	String	Name of the API group to which the API belongs.
api_type	Integer	API type.
api_remark	String	API description.
env_id	String	ID of the environment in which an app has been authorized to call the API.
auth_role	String	Authorizer.
auth_time	String	Authorization time.

Parameter	Type	Description
app_name	String	App name.
app_remark	String	App description.
app_type	String	App type. The default value is apig. Other types are not supported currently. Enumeration values: <ul style="list-style-type: none"> ● apig ● roma
app_creator	String	Creator of the app. <ul style="list-style-type: none"> ● USER: The app is created by a tenant. ● MARKET: The app is allocated by KooGallery. This value is not supported currently.
publish_id	String	API publication record ID.
group_id	String	ID of the API group to which the API belongs.
auth_tunnel	String	Authorization channel type. <ul style="list-style-type: none"> ● NORMAL: normal channel ● GREEN: green channel The default value is NORMAL. This parameter is not supported currently. Enumeration values: <ul style="list-style-type: none"> ● NORMAL ● GREEN
auth_whitelist	Array of strings	Whitelist for the green channel.
auth_blacklist	Array of strings	Blacklist for the green channel.
visit_param	String	Access parameters.
roma_app_type	String	ROMA application type. <ul style="list-style-type: none"> ● subscription: subscription application ● integration: integration application Currently, this parameter is not supported.
env_name	String	Name of the environment in which the app has been authorized to call the API.
app_id	String	App ID.

Status code: 400

Table 3-536 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-537 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-538 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-539 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-540 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total": 1,
  "size": 1,
  "auths": [ {
    "api_id": "5f918d104dc84480a75166ba99efff21",
    "app_name": "app_demo",
    "env_id": "DEFAULT_ENVIRONMENT_RELEASE_ID",
    "env_name": "RELEASE",
    "group_id": "c77f5e81d9cb4424bf704ef2b0ac7600",
    "group_name": "api_group_001",
    "api_type": 1,
    "api_name": "Api_http",
    "app_id": "356de8eb7a8742168586e5daf5339965",
    "auth_time": "2020-08-04T04:02:22Z",
    "app_creator": "USER",
    "id": "dd29b33ae4394e3b924b582c6b40880b",
    "api_remark": "Web backend Api",
    "auth_role": "PROVIDER",
    "app_type": "apig",
    "auth_tunnel": "NORMAL",
    "publish_id": "40e7162dc6b94bbbbb1a60d2a24b1b0c"
  } ]
}
```

Status code: 400

Bad Request

```
{
  "error_code": "APIG.2012",
  "error_msg": "Invalid parameter value,parameterName:api_name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code": "APIG.1002",
  "error_msg": "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code": "APIG.1005",
}
```

```
{
  "error_msg": "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code": "APIG.3004",
  "error_msg": "App 356de8eb7a8742168586e5daf5339965 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code": "APIG.9999",
  "error_msg": "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.10.4 Querying APIs Not Bound with an App

Function

This API is used to query the self-developed APIs to which an app has not been bound in a specified environment.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/app-auths/unbound-apis

Table 3-541 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-542 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20
app_id	Yes	String	App ID.
env_id	Yes	String	Environment ID.
group_id	No	String	API group ID.
api_id	No	String	API ID.
api_name	No	String	API name.

Request Parameters

Table 3-543 Request header parameters

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

Response Parameters

Status code: 200

Table 3-544 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
apis	Array of ApiOutline objects	API list.

Table 3-545 ApiOutline

Parameter	Type	Description
auth_type	String	API authentication mode.
run_env_name	String	Name of the environment in which the API has been published.
group_name	String	Name of the API group to which the API belongs.
publish_id	String	Publication record ID.
group_id	String	ID of the API group to which the API belongs.
name	String	API name.
remark	String	API description.
run_env_id	String	ID of the environment in which the API has been published.

Parameter	Type	Description
id	String	API ID.
req_uri	String	API request address.

Status code: 400

Table 3-546 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-547 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-548 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-549 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-550 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total": 2,
  "size": 2,
  "apis": [ {
    "auth_type": "APP",
    "run_env_name": "",
    "group_name": "api_group_001",
    "publish_id": "",
    "group_id": "c77f5e81d9cb4424bf704ef2b0ac7600",
    "name": "Api_function",
    "remark": "FunctionGraph backend API",
    "run_env_id": "",
    "id": "abd9c4b2ff974888b0ba79be7e6b2763",
    "req_uri": "/test/function"
  }, {
    "auth_type": "APP",
    "run_env_name": "RELEASE",
    "group_name": "APIGroup_d3da",
    "publish_id": "ca2631e233a74a758744ae1e19cc5ad7",
    "group_id": "6acd94abe58747ee8a73b10c70817bac",
    "name": "API_test",
    "remark": "FunctionGraph backend API",
    "run_env_id": "DEFAULT_ENVIRONMENT_RELEASE_ID",
    "id": "11cbec3a7a8345ca981b86d161bc436e",
    "req_uri": "/appcode"
  } ]
}
```

Status code: 400

Bad Request

```
{
  "error_code": "APIG.2012",
  "error_msg": "Invalid parameter value,parameterName:api_name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code": "APIG.1002",
```

```
{
  "error_msg": "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code": "APIG.1005",
  "error_msg": "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code": "APIG.3004",
  "error_msg": "App 356de8eb7a8742168586e5daf5339965 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code": "APIG.9999",
  "error_msg": "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.10.5 Querying Apps Bound to an API

Function

This API is used to query the apps that have been bound to a specified API.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/app-auths/binded-apps

Table 3-551 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-552 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20
api_id	No	String	API ID.
app_name	No	String	App name.
app_id	No	String	App ID.
env_id	No	String	Environment ID.

Request Parameters

Table 3-553 Request header parameters

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

Response Parameters

Status code: 200

Table 3-554 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
auths	Array of ApiAuthInfo objects	API list.

Table 3-555 ApiAuthInfo

Parameter	Type	Description
id	String	Authorization record ID.
api_id	String	API ID.
api_name	String	API name.
group_name	String	Name of the API group to which the API belongs.
api_type	Integer	API type.
api_remark	String	API description.
env_id	String	ID of the environment in which an app has been authorized to call the API.
auth_role	String	Authorizer.
auth_time	String	Authorization time.

Parameter	Type	Description
app_name	String	App name.
app_remark	String	App description.
app_type	String	App type. The default value is apig. Other types are not supported currently. Enumeration values: <ul style="list-style-type: none"> • apig • roma
app_creator	String	Creator of the app. <ul style="list-style-type: none"> • USER: The app is created by a tenant. • MARKET: The app is allocated by KooGallery. This value is not supported currently.
publish_id	String	API publication record ID.
group_id	String	ID of the API group to which the API belongs.
auth_tunnel	String	Authorization channel type. <ul style="list-style-type: none"> • NORMAL: normal channel • GREEN: green channel The default value is NORMAL. This parameter is not supported currently. Enumeration values: <ul style="list-style-type: none"> • NORMAL • GREEN
auth_whitelist	Array of strings	Whitelist for the green channel.
auth_blacklist	Array of strings	Blacklist for the green channel.
visit_param	String	Access parameters.
roma_app_type	String	ROMA application type. <ul style="list-style-type: none"> • subscription: subscription application • integration: integration application Currently, this parameter is not supported.
env_name	String	Name of the environment in which the app has been authorized to call the API.
app_id	String	App ID.

Status code: 400

Table 3-556 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-557 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-558 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-559 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-560 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total": 1,
  "size": 1,
  "auths": [ {
    "api_id": "5f918d104dc84480a75166ba99efff21",
    "app_name": "app_demo",
    "env_id": "DEFAULT_ENVIRONMENT_RELEASE_ID",
    "env_name": "RELEASE",
    "group_id": "c77f5e81d9cb4424bf704ef2b0ac7600",
    "group_name": "api_group_001",
    "api_type": 1,
    "api_name": "Api_http",
    "app_id": "356de8eb7a8742168586e5daf5339965",
    "auth_time": "2020-08-04T04:02:22Z",
    "app_creator": "USER",
    "id": "dd29b33ae4394e3b924b582c6b40880b",
    "api_remark": "Web backend API",
    "auth_role": "PROVIDER",
    "app_type": "apig",
    "auth_tunnel": "NORMAL"
  } ]
}
```

Status code: 400

Bad Request

```
{
  "error_code": "APIG.2012",
  "error_msg": "Invalid parameter value,parameterName:app_name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code": "APIG.1002",
  "error_msg": "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code": "APIG.1005",
  "error_msg": "No permissions to request this method"
}
```


Status code: 404

Not Found

```
{
  "error_code" : "APIG.3002",
  "error_msg" : "API 5f918d104dc84480a75166ba99efff21 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error CodesSee [Error Codes](#).

3.11 Resource Query

3.11.1 Querying API Quantities

Function

This API is used to query the number of APIs that have been published in the RELEASE environment and the number of APIs that have not been published in this environment.

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/resources/outline/apis

Table 3-561 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-562 Request header parameters

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

Response Parameters

Status code: 200

Table 3-563 Response body parameters

Parameter	Type	Description
instance_num	Integer	Total number of APIs.
nums_on_release	Integer	Number of APIs that have been published in the RELEASE environment.
nums_off_release	Integer	Number of APIs that have not been published in the RELEASE environment.

Status code: 400

Table 3-564 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-565 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-566 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-567 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-568 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "instance_num" : 27,
  "nums_on_release" : 11,
  "nums_off_release" : 6
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:instance_id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Bad Request

```
{
  "error_code" : "APIG.3030",
  "error_msg" : "The instance does not exist;id:eddc4d25480b4cd6b512f270a1b8b341"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Bad Request
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.11.2 Querying API Group Quantities

Function

This API is used to query the number of API groups that have been listed on KooGallery and the number of API groups that have not been listed.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/resources/outline/groups

Table 3-569 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-570 Request header parameters

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

Response Parameters

Status code: 200

Table 3-571 Response body parameters

Parameter	Type	Description
offsell_nums	Integer	Number of API groups that have not been listed on KooGallery. Currently, this parameter is not supported.
onsell_nums	Integer	Number of API groups that have been listed on KooGallery.

Status code: 400

Table 3-572 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-573 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-574 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-575 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-576 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "offsell_nums" : 0,
  "onsell_nums" : 23
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:instance_id. Please refer to the support
```

```
documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3030",
  "error_msg" : "The instance does not exist;id:eddc4d25480b4cd6b512f270a1b8b341"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.11.3 Querying App Quantities

Function

This API is used to query the number of apps that have been authorized to access APIs and the number of apps that have not been authorized to access any APIs.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/resources/outline/apps

Table 3-577 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-578 Request header parameters

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

Response Parameters

Status code: 200

Table 3-579 Response body parameters

Parameter	Type	Description
authenticated_nums	Integer	Number of apps that have been authorized to access APIs.
unauthenticated_nums	Integer	Number of apps that have not been authorized to access APIs.

Status code: 400

Table 3-580 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-581 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-582 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-583 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Status code: 500

Table 3-584 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "authenticated_nums" : 7,
  "unauthenticated_nums" : 5
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:instance_id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Bad Request

```
{
  "error_code" : "APIG.3030",
  "error_msg" : "The instance does not exist;id:eddc4d25480b4cd6b512f270a1b8b341"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Bad Request
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.12 App Management

3.12.1 Creating an App

Function

An app is an identity for accessing an API. An app can call the APIs to which it has been authorized.

This API is used to create an app.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances/{instance_id}/apps

Table 3-585 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-586 Request header parameters

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

Table 3-587 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	App name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, and underscores (_) are allowed.
remark	No	String	App description. It cannot exceed 255 characters.
app_key	No	String	AppKey, which can contain 8 to 200 characters, starting with a letter or digit. Only letters, digits, hyphens (-), and underscores (_) are allowed.
app_secret	No	String	Secret, which can contain 8 to 128 characters, starting with a letter or digit. Only letters, digits, and the following special characters are allowed: _-!@#\$\$%

Response Parameters

Status code: 201

Table 3-588 Response body parameters

Parameter	Type	Description
id	String	ID.
name	String	Name.
remark	String	Description.
creator	String	<p>Creator of the app.</p> <ul style="list-style-type: none"> • USER: The app is created by an API user. • MARKET: The app is allocated by KooGallery. <p>The value MARKET is currently not supported. Enumeration values:</p> <ul style="list-style-type: none"> • USER • MARKET
update_time	String	Update time.
app_key	String	AppKey.
app_secret	String	AppSecret.
register_time	String	Registration time.
status	Integer	<p>Status.</p> <ul style="list-style-type: none"> • 1: valid <p>Enumeration values:</p> <ul style="list-style-type: none"> • 1
app_type	String	<p>App type.</p> <ul style="list-style-type: none"> • apig: APIG app, which is not recommended. • roma: ROMA integration application. <p>The default value is apig. Other types are not supported currently. Enumeration values:</p> <ul style="list-style-type: none"> • apig • roma
roma_app_type	String	<p>ROMA application type.</p> <ul style="list-style-type: none"> • subscription: subscription application • integration: integration application <p>Currently, this parameter is not supported.</p>

Status code: 400**Table 3-589** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401**Table 3-590** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403**Table 3-591** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500**Table 3-592** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Creating an app

```
{
  "name" : "app_demo",
  "remark" : "Demo app"
}
```

Example Responses

Status code: 201

Created

```
{
  "creator" : "USER",
  "update_time" : "2020-08-03T13:09:13.122211909Z",
  "app_key" : "ee8f878c252747028f07eb116c2cd91b",
  "name" : "app_demo",
  "remark" : "Demo app",
  "id" : "356de8eb7a8742168586e5daf5339965",
  "app_secret" : "416*****ab8",
  "register_time" : "2020-08-03T13:09:13.122211659Z",
  "status" : 1,
  "app_type" : "apig"
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2011",
  "error_msg" : "Invalid parameter value,parameterName:name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
201	Created
400	Bad Request
401	Unauthorized

Status Code	Description
403	Forbidden
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.12.2 Modifying an App

Function

This API is used to modify the information about an app. Only the name and remark parameters can be modified. If the function of customizing keys and secrets is enabled, app_key and app_secret can also be modified.

Calling Method

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

URI

PUT /v2/{project_id}/apigw/instances/{instance_id}/apps/{app_id}

Table 3-593 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
app_id	Yes	String	App ID.

Request Parameters

Table 3-594 Request header parameters

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

Table 3-595 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	App name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, and underscores (_) are allowed.
remark	No	String	App description. It cannot exceed 255 characters.
app_key	No	String	AppKey, which can contain 8 to 200 characters, starting with a letter or digit. Only letters, digits, hyphens (-), and underscores (_) are allowed.
app_secret	No	String	Secret, which can contain 8 to 128 characters, starting with a letter or digit. Only letters, digits, and the following special characters are allowed: _-!@#\$\$%

Response Parameters

Status code: 201

Table 3-596 Response body parameters

Parameter	Type	Description
id	String	ID.
name	String	Name.
remark	String	Description.

Parameter	Type	Description
creator	String	<p>Creator of the app.</p> <ul style="list-style-type: none"> • USER: The app is created by an API user. • MARKET: The app is allocated by KooGallery. <p>The value MARKET is currently not supported. Enumeration values:</p> <ul style="list-style-type: none"> • USER • MARKET
update_time	String	Update time.
app_key	String	AppKey.
app_secret	String	AppSecret.
register_time	String	Registration time.
status	Integer	<p>Status.</p> <ul style="list-style-type: none"> • 1: valid <p>Enumeration values:</p> <ul style="list-style-type: none"> • 1
app_type	String	<p>App type.</p> <ul style="list-style-type: none"> • apig: APIG app, which is not recommended. • roma: ROMA integration application. <p>The default value is apig. Other types are not supported currently. Enumeration values:</p> <ul style="list-style-type: none"> • apig • roma
roma_app_type	String	<p>ROMA application type.</p> <ul style="list-style-type: none"> • subscription: subscription application • integration: integration application <p>Currently, this parameter is not supported.</p>

Status code: 400

Table 3-597 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-598 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-599 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-600 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-601 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Modifying an app

```
{
  "name" : "app_demo",
  "remark" : "Demo app"
}
```

Example Responses

Status code: 201

OK

```
{
  "creator" : "USER",
  "update_time" : "2020-08-03T13:21:48.381148828Z",
  "app_key" : "ee8f878c252747028f07eb116c2cd91b",
  "name" : "app_demo",
  "remark" : "Demo app",
  "id" : "356de8eb7a8742168586e5daf5339965",
  "app_secret" : "416*****ab8",
  "register_time" : "2020-08-03T13:09:13",
  "status" : 1,
  "app_type" : "apig"
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3002",
  "error_msg" : "App 356de8eb7a8742168586e5daf5339965 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
201	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.12.3 Deleting an App

Function

This API is used to delete an app.

Deleted apps cannot call APIs.

Calling Method

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

URI

DELETE /v2/{project_id}/apigw/instances/{instance_id}/apps/{app_id}

Table 3-602 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
app_id	Yes	String	App ID.

Request Parameters

Table 3-603 Request header parameters

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

Response Parameters

Status code: 400

Table 3-604 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-605 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-606 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-607 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-608 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 400

Bad Request

```
{  
  "error_code" : "APIG.2012",  
  "error_msg" : "Invalid parameter value,parameterName:id. Please refer to the support documentation"  
}
```

Status code: 401

Unauthorized

```
{  
  "error_code" : "APIG.1002",  
  "error_msg" : "Incorrect token or token resolution failed"  
}
```

Status code: 403

Forbidden

```
{  
  "error_code" : "APIG.1005",  
  "error_msg" : "No permissions to request this method"  
}
```

Status code: 404

Not Found

```
{  
  "error_code" : "APIG.3002",  
  "error_msg" : "App 356de8eb7a8742168586e5daf5339965 does not exist"  
}
```


Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
204	No Content
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.12.4 Resetting the AppSecret of an App

Function

This API is used to reset the AppSecret of an app.

Calling Method

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

URI

PUT /v2/{project_id}/apigw/instances/{instance_id}/apps/secret/{app_id}

Table 3-609 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
app_id	Yes	String	App ID.

Request Parameters

Table 3-610 Request header parameters

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

Table 3-611 Request body parameters

Parameter	Mandatory	Type	Description
app_secret	No	String	Secret, which can contain 8 to 128 characters, starting with a letter or digit. Only letters, digits, and special characters (_-!@#\$\$%). To define an AppSecret, first enable the app_secret parameter.

Response Parameters

Status code: 200

Table 3-612 Response body parameters

Parameter	Type	Description
id	String	ID.
name	String	Name.
remark	String	Description.

Parameter	Type	Description
creator	String	<p>Creator of the app.</p> <ul style="list-style-type: none"> • USER: The app is created by an API user. • MARKET: The app is allocated by KooGallery. <p>The value MARKET is currently not supported. Enumeration values:</p> <ul style="list-style-type: none"> • USER • MARKET
update_time	String	Update time.
app_key	String	AppKey.
app_secret	String	AppSecret.
register_time	String	Registration time.
status	Integer	<p>Status.</p> <ul style="list-style-type: none"> • 1: valid <p>Enumeration values:</p> <ul style="list-style-type: none"> • 1
app_type	String	<p>App type.</p> <ul style="list-style-type: none"> • apig: APIG app, which is not recommended. • roma: ROMA integration application. <p>The default value is apig. Other types are not supported currently. Enumeration values:</p> <ul style="list-style-type: none"> • apig • roma
roma_app_type	String	<p>ROMA application type.</p> <ul style="list-style-type: none"> • subscription: subscription application • integration: integration application <p>Currently, this parameter is not supported.</p>

Status code: 400

Table 3-613 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-614 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-615 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-616 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-617 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Resetting secret

```
{
  "app_secret" : "1ff*****9a4"
}
```

Example Responses

Status code: 200

OK

```
{
  "creator" : "USER",
  "update_time" : "2020-08-03T14:12:43.038171689Z",
  "app_key" : "ee8f878c252747028f07eb116c2cd91b",
  "name" : "app_demo",
  "remark" : "Demo app",
  "id" : "356de8eb7a8742168586e5daf5339965",
  "app_secret" : "1ff*****9a4",
  "register_time" : "2020-08-03T13:09:13Z",
  "status" : 1,
  "app_type" : "apig"
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3002",
  "error_msg" : "App 356de8eb7a8742168586e5daf5339965 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.12.5 Verifying an App

Function

This API is provided for users (excluding app owner) to check whether an app exists. Only the basic information, such as ID, name, and remark, of the app is displayed.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/apps/validation/{app_id}

Table 3-618 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
app_id	Yes	String	App ID.

Request Parameters

Table 3-619 Request header parameters

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

Response Parameters

Status code: 200

Table 3-620 Response body parameters

Parameter	Type	Description
id	String	ID.
name	String	Name.
remark	String	Description.

Status code: 400

Table 3-621 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-622 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-623 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-624 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-625 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "name" : "app_demo",
  "remark" : "Demo app",
  "id" : "356de8eb7a8742168586e5daf5339965"
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{  
  "error_code" : "APIG.1002",  
  "error_msg" : "Incorrect token or token resolution failed"  
}
```

Status code: 403

Forbidden

```
{  
  "error_code" : "APIG.1005",  
  "error_msg" : "No permissions to request this method"  
}
```

Status code: 404

Not Found

```
{  
  "error_code" : "APIG.3002",  
  "error_msg" : "App 356de8eb7a8742168586e5daf5339965 does not exist"  
}
```

Status code: 500

Internal Server Error

```
{  
  "error_code" : "APIG.9999",  
  "error_msg" : "System error"  
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.12.6 Querying App Details

Function

This API is used to query the details of an app.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/apps/{app_id}

Table 3-626 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
app_id	Yes	String	App ID.

Request Parameters

Table 3-627 Request header parameters

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

Response Parameters

Status code: 200

Table 3-628 Response body parameters

Parameter	Type	Description
id	String	ID.
name	String	Name.
remark	String	Description.

Parameter	Type	Description
creator	String	<p>Creator of the app.</p> <ul style="list-style-type: none"> • USER: The app is created by an API user. • MARKET: The app is allocated by KooGallery. <p>The value MARKET is currently not supported. Enumeration values:</p> <ul style="list-style-type: none"> • USER • MARKET
update_time	String	Update time.
app_key	String	AppKey.
app_secret	String	AppSecret.
register_time	String	Registration time.
status	Integer	<p>Status.</p> <ul style="list-style-type: none"> • 1: valid <p>Enumeration values:</p> <ul style="list-style-type: none"> • 1
app_type	String	<p>App type.</p> <ul style="list-style-type: none"> • apig: APIG app, which is not recommended. • roma: ROMA integration application. <p>The default value is apig. Other types are not supported currently. Enumeration values:</p> <ul style="list-style-type: none"> • apig • roma
roma_app_type	String	<p>ROMA application type.</p> <ul style="list-style-type: none"> • subscription: subscription application • integration: integration application <p>Currently, this parameter is not supported.</p>

Status code: 400

Table 3-629 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-630 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-631 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-632 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-633 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "creator": "USER",
  "update_time": "2020-08-03T13:09:13Z",
  "app_key": "ee8f878c252747028f07eb116c2cd91b",
  "name": "app_demo",
  "remark": "Demo app",
  "id": "356de8eb7a8742168586e5daf5339965",
  "app_secret": "416*****ab8",
  "register_time": "2020-08-03T13:09:13Z",
  "status": 1,
  "app_type": "apig"
}
```

Status code: 400

Bad Request

```
{
  "error_code": "APIG.2012",
  "error_msg": "Invalid parameter value,parameterName:id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code": "APIG.1002",
  "error_msg": "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code": "APIG.1005",
  "error_msg": "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code": "APIG.3002",
  "error_msg": "App 356de8eb7a8742168586e5daf5339965 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code": "APIG.9999",
  "error_msg": "System error"
}
```

Status Codes

Status Code	Description
200	OK

Status Code	Description
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.12.7 Querying Apps

Function

This API is used to query apps.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/apps

Table 3-634 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-635 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20
id	No	String	App ID.
name	No	String	App name.
status	No	Integer	App status.
app_key	No	String	AppKey.
creator	No	String	Creator of the app. <ul style="list-style-type: none"> • USER: The app is created by an API user. • MARKET: This parameter is not used currently.
precise_search	No	String	Parameter name (name) for exact matching.

Request Parameters

Table 3-636 Request header parameters

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

Response Parameters

Status code: 200

Table 3-637 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
apps	Array of AppInfoWithBindNum objects	App list.

Table 3-638 AppInfoWithBindNum

Parameter	Type	Description
id	String	ID.
name	String	Name.
remark	String	Description.
creator	String	Creator of the app. <ul style="list-style-type: none"> • USER: The app is created by an API user. • MARKET: The app is allocated by KooGallery. The value MARKET is currently not supported. Enumeration values: <ul style="list-style-type: none"> • USER • MARKET
update_time	String	Update time.
app_key	String	AppKey.
app_secret	String	AppSecret.
register_time	String	Registration time.
status	Integer	Status. <ul style="list-style-type: none"> • 1: valid Enumeration values: <ul style="list-style-type: none"> • 1

Parameter	Type	Description
app_type	String	App type. <ul style="list-style-type: none"> • apig: APIG app, which is not recommended. • roma: ROMA integration application. The default value is apig. Other types are not supported currently. Enumeration values: <ul style="list-style-type: none"> • apig • roma
roma_app_type	String	ROMA application type. <ul style="list-style-type: none"> • subscription: subscription application • integration: integration application Currently, this parameter is not supported.
bind_num	Integer	Number of bound APIs.

Status code: 400

Table 3-639 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-640 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-641 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Status code: 500

Table 3-642 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total" : 2,
  "size" : 2,
  "apps" : [ {
    "bind_num" : 0,
    "creator" : "USER",
    "update_time" : "2020-08-03T13:09:13Z",
    "app_key" : "ee8f878c252747028f07eb116c2cd91b",
    "name" : "app_demo",
    "remark" : "Demo app",
    "id" : "356de8eb7a8742168586e5daf5339965",
    "app_secret" : "416*****ab8",
    "register_time" : "2020-08-03T13:09:13Z",
    "status" : 1,
    "app_type" : "apig"
  }, {
    "bind_num" : 3,
    "creator" : "USER",
    "update_time" : "2020-05-27T10:38:03.133586Z",
    "app_key" : "840b8b5b1efc4ec686639759c2c584da",
    "name" : "app_001",
    "id" : "9ed8b7fe84224de681e7d7a5587e76dc",
    "app_secret" : "0a4*****c6e",
    "register_time" : "2020-03-28T11:09:06Z",
    "status" : 1
  }
  ]
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2011",
```

```
"error_msg" : "Invalid parameter value,parameterName:name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.12.8 Creating an AppCode

Function

This API is used to create an AppCode for an app for simple authentication.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances/{instance_id}/apps/{app_id}/app-codes

Table 3-643 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
app_id	Yes	String	App ID.

Request Parameters

Table 3-644 Request header parameters

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

Table 3-645 Request body parameters

Parameter	Mandatory	Type	Description
app_code	Yes	String	AppCode value. It can contain 64 to 180 characters, starting with a letter, digit, plus sign (+), or slash (/). Only letters, digits, and the following special characters are allowed: +_!@#\$%-=

Response Parameters

Status code: 201

Table 3-646 Response body parameters

Parameter	Type	Description
app_code	String	AppCode value. It can contain 64 to 180 characters, starting with a letter, digit, plus sign (+), or slash (/). Only letters, digits, and the following special characters are allowed: +_!@#\$\$%-=
id	String	ID.
app_id	String	App ID.
create_time	String	Creation time.

Status code: 400

Table 3-647 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-648 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-649 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-650 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-651 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Creating an AppCode for simple authentication

```
{
  "app_code" : "GjOD3g80AABuuFeEJpVQADBlAjBh3UzC7W
+gr4VJBB5BtJ4fdVOQoSvoji3gFxUDb5pWBz9wUcw9+8/bFZ1B/4pq29wCMQC0pQWX6zTndljDEL99As1pw
+WntAU9xcq+ffagoH6zDpKUvdxV6Ezj8LcCcPZN6BU="
}
```

Example Responses

Status code: 201

Created

```
{
  "app_code" : "GjOD3g80AABuuFeEJpVQADBlAjBh3UzC7W
+gr4VJBB5BtJ4fdVOQoSvoji3gFxUDb5pWBz9wUcw9+8/bFZ1B/4pq29wCMQC0pQWX6zTndljDEL99As1pw
+WntAU9xcq+ffagoH6zDpKUvdxV6Ezj8LcCcPZN6BU=",
  "app_id" : "9ed8b7fe84224de681e7d7a5587e76dc",
  "id" : "32dc8ca22d1b4b9cb94022186880576b",
  "create_time" : "2020-07-24T02:37:24.835128293Z"
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:app_id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
```

```
"error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3004",
  "error_msg" : "App 9ed8b7fe84224de681e7d7a5587e76dc does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
201	Created
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.12.9 Generating an AppCode

Function

This API is used to generate a random AppCode.

Calling Method

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

URI

PUT /v2/{project_id}/apigw/instances/{instance_id}/apps/{app_id}/app-codes

Table 3-652 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
app_id	Yes	String	App ID.

Request Parameters

Table 3-653 Request header parameters

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

Response Parameters

Status code: 201

Table 3-654 Response body parameters

Parameter	Type	Description
app_code	String	AppCode value. It can contain 64 to 180 characters, starting with a letter, digit, plus sign (+), or slash (/). Only letters, digits, and the following special characters are allowed: +_!@#\$\$%&-/=
id	String	ID.
app_id	String	App ID.
create_time	String	Creation time.

Status code: 400

Table 3-655 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-656 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-657 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-658 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-659 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 201

Created

```
{
  "app_code" : "fdc8d90a30174460a91ddacfa54d6f04c92e523a85cc4a1894f87cb13b6f572a",
  "app_id" : "9ed8b7fe84224de681e7d7a5587e76dc",
  "id" : "b3d34f746d0847fb95138670e10207ed",
  "create_time" : "2020-07-24T02:31:45.790909295Z"
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:app_id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3004",
  "error_msg" : "App 9ed8b7fe84224de681e7d7a5587e76dc does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
}
```

```
"error_msg" : "System error"  
}
```

Status Codes

Status Code	Description
201	Created
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.12.10 Deleting an AppCode

Function

This API is used to delete an AppCode. Deleted AppCodes cannot be used for simple authentication.

Calling Method

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

URI

DELETE /v2/{project_id}/apigw/instances/{instance_id}/apps/{app_id}/app-codes/{app_code_id}

Table 3-660 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Parameter	Mandatory	Type	Description
app_id	Yes	String	App ID.
app_code_id	Yes	String	AppCode ID.

Request Parameters

Table 3-661 Request header parameters

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

Response Parameters

Status code: 400

Table 3-662 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-663 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-664 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-665 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-666 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:app_id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3004",
  "error_msg" : "App 9ed8b7fe84224de681e7d7a5587e76dc does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
204	No Content
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.12.11 Querying AppCode Details

Function

This API is used to query the details of an AppCode created for an app for simple authentication.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/apps/{app_id}/app-codes/{app_code_id}

Table 3-667 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
app_id	Yes	String	App ID.
app_code_id	Yes	String	AppCode ID.

Request Parameters

Table 3-668 Request header parameters

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

Response Parameters

Status code: 201

Table 3-669 Response body parameters

Parameter	Type	Description
app_code	String	AppCode value. It can contain 64 to 180 characters, starting with a letter, digit, plus sign (+), or slash (/). Only letters, digits, and the following special characters are allowed: +_!@#\$\$%-=
id	String	ID.

Parameter	Type	Description
app_id	String	App ID.
create_time	String	Creation time.

Status code: 400

Table 3-670 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-671 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-672 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-673 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-674 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 201

Created

```
{
  "app_code" : "fdc8d90a30174460a91ddacfa54d6f04c92e523a85cc4a1894f87cb13b6f572a",
  "app_id" : "9ed8b7fe84224de681e7d7a5587e76dc",
  "id" : "b3d34f746d0847fb95138670e10207ed",
  "create_time" : "2020-07-24T02:31:45Z"
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:app_id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3004",
  "error_msg" : "App 9ed8b7fe84224de681e7d7a5587e76dc does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
201	Created
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.12.12 Querying AppCodes of an App

Function

This API is used to query the AppCodes of an app.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/apps/{app_id}/app-codes

Table 3-675 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
app_id	Yes	String	App ID.

Table 3-676 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20

Request Parameters

Table 3-677 Request header parameters

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

Response Parameters

Status code: 200

Table 3-678 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
app_codes	Array of AppCodeBaseInfo objects	AppCode list.

Table 3-679 AppCodeBaseInfo

Parameter	Type	Description
app_code	String	AppCode value. It can contain 64 to 180 characters, starting with a letter, digit, plus sign (+), or slash (/). Only letters, digits, and the following special characters are allowed: +_!@#\$\$%&-/=
id	String	ID.
app_id	String	App ID.
create_time	String	Creation time.

Status code: 400

Table 3-680 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-681 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-682 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-683 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-684 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total" : 2,
  "size" : 2,
  "app_codes" : [ {
    "app_code" : "GjOD3g80AABuuFeEJpVQADBlAjBh3UzC7W
+gr4VJBB5BtJ4fdVOQoSvoji3gFxUDb5pWBz9wUcw9+8/bFZ1B/4pq29wCMQC0pQWX6zTndljDEl99As1pw
+WntAU9xcq+ffagoH6zDpKUvdxV6Ezj8LcCcPZN6BU=",
    "app_id" : "9ed8b7fe84224de681e7d7a5587e76dc",
    "id" : "32dc8ca22d1b4b9cb94022186880576b",
    "create_time" : "2020-07-24T02:37:24Z"
  }, {
    "app_code" : "fdc8d90a30174460a91ddacfa54d6f04c92e523a85cc4a1894f87cb13b6f572a",
    "app_id" : "9ed8b7fe84224de681e7d7a5587e76dc",
```

```

    "id" : "b3d34f746d0847fb95138670e10207ed",
    "create_time" : "2020-07-24T02:31:45Z"
  } ]
}

```

Status code: 400

Bad Request

```

{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:app_id. Please refer to the support documentation"
}

```

Status code: 401

Unauthorized

```

{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}

```

Status code: 403

Forbidden

```

{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}

```

Status code: 404

Not Found

```

{
  "error_code" : "APIG.3004",
  "error_msg" : "App 9ed8b7fe84224de681e7d7a5587e76dc does not exist"
}

```

Status code: 500

Internal Server Error

```

{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}

```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found

Status Code	Description
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.13 Domain Name Management

3.13.1 Binding a Domain Name

Function

A user-defined domain name takes effect only after an A record set has been added. For details, see section "Adding an A Record Set" in the Domain Name Service User Guide.

An API group can be bound with a maximum of five domain names. After you bind a domain name to an API group, APIs in the group can be called using the domain name.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances/{instance_id}/api-groups/{group_id}/domains

Table 3-685 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
group_id	Yes	String	API group ID.

Request Parameters

Table 3-686 Request header parameters

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

Table 3-687 Request body parameters

Parameter	Mandatory	Type	Description
min_ssl_version	No	String	Minimum SSL version. TLS 1.1 and TLS 1.2 are supported. Default: TLSv1.1 Enumeration values: <ul style="list-style-type: none"> • TLSv1.1 • TLSv1.2
is_http_redirect_to_https	No	Boolean	Whether to enable HTTP redirection to HTTPS. The value false means disable and true means enable. The default value is false. Default: false
url_domain	Yes	String	Custom domain name. It can contain a maximum of 255 characters and must comply with domain name specifications.

Response Parameters

Status code: 201

Table 3-688 Response body parameters

Parameter	Type	Description
url_domain	String	Custom domain name.
id	String	Domain ID.

Parameter	Type	Description
status	Integer	CNAME resolution status. <ul style="list-style-type: none"> • 1: not resolved • 2: resolving • 3: resolved • 4: resolution failed Enumeration values: <ul style="list-style-type: none"> • 1 • 2 • 3 • 4
min_ssl_version	String	Minimum SSL version supported.
is_http_redirect_to_https	Boolean	Whether to enable HTTP redirection to HTTPS. The value false means disable and true means enable. The default value is false. Default: false
verified_client_certificate_enabled	Boolean	Whether to enable client certificate verification. This parameter is available only when a certificate is bound. It is enabled by default if trusted_root_ca exists, and disabled if trusted_root_ca does not exist. Default: false

Status code: 400

Table 3-689 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-690 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-691 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-692 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-693 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Binding a domain name to an API group

```
{
  "url_domain" : "www.company.com"
}
```

Example Responses

Status code: 201

Created

```
{
  "url_domain" : "www.company.com",
  "id" : "c5e0d5ba62a34d26ad5c709ae22c1a17",
  "status" : 3,
  "min_ssl_version" : "TLSv1.1",
}
```

```
"is_http_redirect_to_https" : false,
"verified_client_certificate_enabled" : false
}
```

Status code: 400

Bad Request

```
{
"error_code" : "APIG.2024",
"error_msg" : "Invalid URL domain name"
}
```

Status code: 401

Unauthorized

```
{
"error_code" : "APIG.1002",
"error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
"error_code" : "APIG.1005",
"error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
"error_code" : "APIG.3001",
"error_msg" : "API group c77f5e81d9cb4424bf704ef2b0ac7600 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
"error_code" : "APIG.9999",
"error_msg" : "System error"
}
```

Status Codes

Status Code	Description
201	Created
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.13.2 Adding a Certificate to a Domain Name

Function

When you create an API to be accessed through HTTPS, you must add an SSL certificate to the independent domain name that has been bound to the group the API belongs to.

This API is used to add a certificate to a specific domain name.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances/{instance_id}/api-groups/{group_id}/domains/{domain_id}/certificate

Table 3-694 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
group_id	Yes	String	API group ID.
domain_id	Yes	String	Domain ID.

Request Parameters

Table 3-695 Request header parameters

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

Table 3-696 Request body parameters

Parameter	Mandatory	Type	Description
cert_content	Yes	String	Certificate content.
name	Yes	String	Certificate name. It can contain 4 to 50 characters, starting with a letter. Only letters, digits, and underscores (_) are allowed.
private_key	Yes	String	Private key.

Response Parameters

Status code: 201

Table 3-697 Response body parameters

Parameter	Type	Description
url_domain	String	Custom domain name.
id	String	Domain ID.
status	Integer	CNAME resolution status. <ul style="list-style-type: none"> • 1: not resolved • 2: resolving • 3: resolved • 4: resolution failed Enumeration values: <ul style="list-style-type: none"> • 1 • 2 • 3 • 4
min_ssl_version	String	Minimum SSL version supported.
is_http_redirect_to_https	Boolean	Whether to enable HTTP redirection to HTTPS. The value false means disable and true means enable. The default value is false. Default: false

Parameter	Type	Description
verified_client_certificate_enabled	Boolean	Whether to enable client certificate verification. This parameter is available only when a certificate is bound. It is enabled by default if trusted_root_ca exists, and disabled if trusted_root_ca does not exist. Default: false
ssl_name	String	Certificate name.
ssl_id	String	Certificate ID.

Status code: 400

Table 3-698 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-699 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-700 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-701 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-702 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Binding a certificate to a domain name

```
{
  "name" : "cert_demo",
  "private_key" : ""-----BEGIN PRIVATE KEY-----THIS IS YOUR PRIVATE KEY-----END PRIVATE KEY-----\n",
  "cert_content" : ""-----BEGIN CERTIFICATE-----THIS IS YOUR CERT CONTENT-----END CERTIFICATE-----\n"
}
```

Example Responses

Status code: 201

Created

```
{
  "ssl_name" : "cert_demo",
  "url_domain" : "www.example.com",
  "ssl_id" : "a27be832f2e9441c8127fe48e3b5ac67",
  "id" : " f6bb84ccf1c34035878aa51b7253b21c",
  "status" : 3
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3020",
  "error_msg" : "The URL domain does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
201	Created
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.13.3 Modifying a Domain Name

Function

This API is used to modify the configuration of a domain name bound to an API group.

Calling Method

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

URI

PUT /v2/{project_id}/apigw/instances/{instance_id}/api-groups/{group_id}/domains/{domain_id}

Table 3-703 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
group_id	Yes	String	API group ID.
domain_id	Yes	String	Domain ID.

Request Parameters

Table 3-704 Request header parameters

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

Table 3-705 Request body parameters

Parameter	Mandatory	Type	Description
min_ssl_version	Yes	String	Minimum SSL version. TLS 1.1 and TLS 1.2 are supported. Default: TLSv1.1 Enumeration values: <ul style="list-style-type: none"> • TLSv1.1 • TLSv1.2

Parameter	Mandatory	Type	Description
is_http_redirect_to_https	No	Boolean	Whether to enable HTTP redirection to HTTPS. The value false means disable and true means enable. The default value is false. Default: false
verified_client_certificate_enabled	No	Boolean	Whether to enable client certificate verification. This parameter is available only when a certificate is bound. It is enabled by default if trusted_root_ca exists, and disabled if trusted_root_ca does not exist. Default: false

Response Parameters

Status code: 201

Table 3-706 Response body parameters

Parameter	Type	Description
url_domain	String	Custom domain name.
id	String	Domain ID.
status	Integer	CNAME resolution status. <ul style="list-style-type: none"> • 1: not resolved • 2: resolving • 3: resolved • 4: resolution failed Enumeration values: <ul style="list-style-type: none"> • 1 • 2 • 3 • 4
min_ssl_version	String	Minimum SSL version supported.

Parameter	Type	Description
is_http_redirect_to_https	Boolean	Whether to enable HTTP redirection to HTTPS. The value false means disable and true means enable. The default value is false. Default: false
verified_client_certificate_enabled	Boolean	Whether to enable client certificate verification. This parameter is available only when a certificate is bound. It is enabled by default if trusted_root_ca exists, and disabled if trusted_root_ca does not exist. Default: false

Status code: 400

Table 3-707 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-708 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-709 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-710 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-711 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Modifying a domain name

```
{
  "min_ssl_version" : "TLSv1.2"
}
```

Example Responses

Status code: 201

Created

```
{
  "id" : "0a515af69f4e4dcca84fbf85f68c0e27",
  "url_domain" : "www.example.com",
  "status" : 3,
  "min_ssl_version" : "TLSv1.2",
  "is_http_redirect_to_https" : false,
  "verified_client_certificate_enabled" : false
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.3474",
  "error_msg" : "The API group ID in the URL does not match the API group to which the URL domain has been bound"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3020",
  "error_msg" : "The URL domain does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
201	Created
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error CodesSee [Error Codes](#).

3.13.4 Unbinding a Domain Name

Function

This API is used to unbind a custom domain name from an API group.

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

URI

DELETE /v2/{project_id}/apigw/instances/{instance_id}/api-groups/{group_id}/domains/{domain_id}

Table 3-712 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
group_id	Yes	String	API group ID.
domain_id	Yes	String	Domain ID.

Request Parameters

Table 3-713 Request header parameters

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

Response Parameters

Status code: 400

Table 3-714 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-715 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-716 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-717 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-718 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.3474",
```

```
"error_msg" : "The API group ID in the URL does not match the API group to which the URL domain has been bound"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3020",
  "error_msg" : "The URL domain does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
204	No Content
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.13.5 Deleting the Certificate Bound to a Domain Name

Function

This API is used to delete a certificate that is no longer needed or has expired.

Calling Method

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

URI

DELETE /v2/{project_id}/apigw/instances/{instance_id}/api-groups/{group_id}/domains/{domain_id}/certificate/{certificate_id}

Table 3-719 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
group_id	Yes	String	API group ID.
domain_id	Yes	String	Domain ID.
certificate_id	Yes	String	Certificate ID.

Request Parameters

Table 3-720 Request header parameters

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

Response Parameters

Status code: 400

Table 3-721 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-722 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-723 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-724 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-725 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:domain_id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3020",
  "error_msg" : "The URL domain does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
204	No Content
400	Bad Request
401	Unauthorized
403	Forbidden

Status Code	Description
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.13.6 Querying Details of the Certificate Bound to a Domain Name

Function

This API is used to query the details of the certificate bound to a domain name.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/api-groups/{group_id}/domains/{domain_id}/certificate/{certificate_id}

Table 3-726 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
group_id	Yes	String	API group ID.
domain_id	Yes	String	Domain ID.
certificate_id	Yes	String	Certificate ID.

Request Parameters

Table 3-727 Request header parameters

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

Response Parameters

Status code: 200

Table 3-728 Response body parameters

Parameter	Type	Description
id	String	Certificate ID.
name	String	Certificate name.
type	String	Certificate type. Options: <ul style="list-style-type: none"> • global: Global certificate. • instance: Gateway certificate. Enumeration values: <ul style="list-style-type: none"> • global • instance
instance_id	String	Gateway ID. <ul style="list-style-type: none"> • If type is set to global, the default value is common. • If type is set to instance, a gateway ID is displayed.
project_id	String	Project ID.
create_time	String	Creation time.
update_time	String	Update time.
common_name	String	Certificate domain name.
san	Array of strings	Subject alternative names.
version	Integer	Certificate version.

Parameter	Type	Description
organization	Array of strings	Company or organization.
organizational_unit	Array of strings	Department.
locality	Array of strings	City.
state	Array of strings	State or province.
country	Array of strings	Country or region.
not_before	String	Start time of the certificate validity period.
not_after	String	End time of the certificate validity period.
serial_number	String	Serial No.
issuer	Array of strings	Certificate issuer.
signature_algorithm	String	Signature algorithm.

Status code: 400

Table 3-729 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-730 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-731 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-732 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-733 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "serial_number" : "219450666855693268010130472645821723203",
  "version" : 3,
  "san" : [ "www.company.com" ],
  "not_before" : "2019-06-01T00:00:00Z",
  "issuer" : [ "mkcert development CA" ],
  "not_after" : "2030-08-04T07:41:19Z",
  "organization" : [ "mkcert development certificate" ],
  "signature_algorithm" : "SHA256-RSA",
  "organizational_unit" : [ "XXX\\\DESKTOP-L2TFOFH" ]
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:domain_id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3020",
  "error_msg" : "The URL domain does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.14 Access Control Policy Management

3.14.1 Creating an Access Control Policy

Function

This API is used to create an access control policy to allow or deny API access from certain IP addresses or tenants. The `acl_value` value of a domain is a tenant name rather than a domain name (such as `www.exampleDomain.com`).

Calling Method

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

URI

POST `/v2/{project_id}/apigw/instances/{instance_id}/acls`

Table 3-734 Path Parameters

Parameter	Mandatory	Type	Description
<code>project_id</code>	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
<code>instance_id</code>	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-735 Request header parameters

Parameter	Mandatory	Type	Description
<code>X-Auth-Token</code>	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of <code>X-Subject-Token</code> in the response header is a token.

Table 3-736 Request body parameters

Parameter	Mandatory	Type	Description
acl_name	Yes	String	Access control policy name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, and underscores (_) are allowed.
acl_type	Yes	String	Type. <ul style="list-style-type: none"> • PERMIT (whitelist) • DENY (blacklist) Enumeration values: <ul style="list-style-type: none"> • PERMIT • DENY
acl_value	Yes	String	One or more objects from which the access will be controlled. Separate multiple objects with commas. <ul style="list-style-type: none"> • If entity_type is set to IP, enter up to 100 IP addresses. • If entity_type is set to DOMAIN, enter account names. Each account name can contain up to 64 ASCII characters except commas (,). Do not use only digits. The total length cannot exceed 1024 characters. • If entity_type is set to DOMAIN_ID, enter account IDs. For details about how to obtain an account ID, see "Appendix" > "Obtaining an Account Name and Account ID" in this document.
entity_type	Yes	String	Object type. <ul style="list-style-type: none"> • IP: IP address. • DOMAIN: Account name. • DOMAIN_ID: Account ID. Enumeration values: <ul style="list-style-type: none"> • IP • DOMAIN • DOMAIN_ID

Response Parameters

Status code: 201

Table 3-737 Response body parameters

Parameter	Type	Description
acl_name	String	Name.
acl_type	String	Type. <ul style="list-style-type: none"> • PERMIT (whitelist) • DENY (blacklist)
acl_value	String	Access control objects.
entity_type	String	Object type. <ul style="list-style-type: none"> • IP • DOMAIN • DOMAIN_ID
id	String	ID.
update_time	String	Update time.

Status code: 400

Table 3-738 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-739 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-740 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-741 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-742 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Creating an access control policy to allow access from specified IP addresses

```
{
  "acl_name": "acl_demo",
  "acl_type": "PERMIT",
  "acl_value": "192.168.1.5,192.168.10.1",
  "entity_type": "IP"
}
```

Example Responses

Status code: 201

Created

```
{
  "id": "7eb619ecf2a24943b099833cd24a01ba",
  "acl_name": "acl_demo",
  "entity_type": "IP",
  "acl_type": "PERMIT",
  "acl_value": "192.168.1.5,192.168.10.1",
  "update_time": "2020-08-04T08:42:43.461276217Z"
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2011",
  "error_msg" : "Invalid parameter value,parameterName:acL_type. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3030",
  "error_msg" : "The instance does not exist;id:eddc4d25480b4cd6b512f270a1b8b341"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
201	Created
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.14.2 Modifying an Access Control Policy

Function

This API is used to modify an access control policy. Only attributes `acl_name`, `acl_type`, and `acl_value` can be modified.

Calling Method

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

URI

PUT /v2/{project_id}/apigw/instances/{instance_id}/acls/{acl_id}

Table 3-743 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
acl_id	Yes	String	Access control policy ID.

Request Parameters

Table 3-744 Request header parameters

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

Table 3-745 Request body parameters

Parameter	Mandatory	Type	Description
acl_name	Yes	String	Access control policy name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, and underscores (_) are allowed.
acl_type	Yes	String	Type. <ul style="list-style-type: none"> • PERMIT (whitelist) • DENY (blacklist) Enumeration values: <ul style="list-style-type: none"> • PERMIT • DENY
acl_value	Yes	String	One or more objects from which the access will be controlled. Separate multiple objects with commas. <ul style="list-style-type: none"> • If entity_type is set to IP, enter up to 100 IP addresses. • If entity_type is set to DOMAIN, enter account names. Each account name can contain up to 64 ASCII characters except commas (,). Do not use only digits. The total length cannot exceed 1024 characters. • If entity_type is set to DOMAIN_ID, enter account IDs. For details about how to obtain an account ID, see "Appendix" > "Obtaining an Account Name and Account ID" in this document.
entity_type	Yes	String	Object type. <ul style="list-style-type: none"> • IP: IP address. • DOMAIN: Account name. • DOMAIN_ID: Account ID. Enumeration values: <ul style="list-style-type: none"> • IP • DOMAIN • DOMAIN_ID

Response Parameters

Status code: 200

Table 3-746 Response body parameters

Parameter	Type	Description
acl_name	String	Name.
acl_type	String	Type. <ul style="list-style-type: none"> • PERMIT (whitelist) • DENY (blacklist)
acl_value	String	Access control objects.
entity_type	String	Object type. <ul style="list-style-type: none"> • IP • DOMAIN • DOMAIN_ID
id	String	ID.
update_time	String	Update time.

Status code: 400

Table 3-747 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-748 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-749 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-750 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-751 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Updating an access control policy to allow access from specified IP addresses

```
{
  "acl_name" : "acl_demo",
  "entity_type" : "IP",
  "acl_type" : "PERMIT",
  "acl_value" : "192.168.1.5,192.168.10.1"
}
```

Example Responses

Status code: 200

OK

```
{
  "id" : "7eb619ecf2a24943b099833cd24a01ba",
  "acl_name" : "acl_demo",
  "entity_type" : "IP",
  "acl_type" : "PERMIT",
  "acl_value" : "192.168.1.5,192.168.10.1",
  "update_time" : "2020-08-04T08:54:55.975856802Z"
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2011",
  "error_msg" : "Invalid parameter value,parameterName:acL_type. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3006",
  "error_msg" : "Access control policy 7eb619ecf2a24943b099833cd24a01ba does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.14.3 Deleting an Access Control Policy

Function

This API is used to delete an access control policy. Access control policies bound to APIs cannot be deleted.

Calling Method

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

URI

DELETE /v2/{project_id}/apigw/instances/{instance_id}/acls/{acl_id}

Table 3-752 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
acl_id	Yes	String	Access control policy ID.

Request Parameters

Table 3-753 Request header parameters

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

Response Parameters

Status code: 400

Table 3-754 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-755 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-756 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-757 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-758 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2011",
  "error_msg" : "Invalid parameter value,parameterName:id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3006",
  "error_msg" : "Access control policy 7eb619ecf2a24943b099833cd24a01ba does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
204	No Content
400	Bad Request
401	Unauthorized
403	Forbidden

Status Code	Description
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.14.4 Deleting Multiple Access Control Policies

Function

This API is used to delete multiple access control policies.

Access control policies bound to APIs cannot be deleted.

Calling Method

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

URI

PUT /v2/{project_id}/apigw/instances/{instance_id}/acls

Table 3-759 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-760 Query Parameters

Parameter	Mandatory	Type	Description
action	Yes	String	The value must be delete.

Request Parameters

Table 3-761 Request header parameters

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

Table 3-762 Request body parameters

Parameter	Mandatory	Type	Description
acls	No	Array of strings	IDs of the access control policies to be deleted.

Response Parameters

Status code: 200

Table 3-763 Response body parameters

Parameter	Type	Description
success_count	Integer	Number of access control policies that have been successfully deleted.
failure	Array of AclBatchResultFailureResp objects	Error message and access control policies that fail to be deleted.

Table 3-764 AclBatchResultFailureResp

Parameter	Type	Description
acl_id	String	ID of an access control policy that fails to be deleted.
acl_name	String	Name of the access control policy.
error_code	String	Error code.
error_msg	String	Error message.

Status code: 400

Table 3-765 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-766 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-767 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-768 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-769 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Example Requests

Deleting multiple access control policies

```
{
  "acls" : [ "7eb619ecf2a24943b099833cd24a01ba", "3a68d39f115d4c128fccd6f624ea6109" ]
}
```

Example Responses

Status code: 200

OK

```
{
  "failure" : [ {
    "acl_id" : "7eb619ecf2a24943b099833cd24a01ba",
    "acl_name" : "acl_demo",
    "error_code" : "APIG.3447",
    "error_msg" : "The access control policy has been bound to APIs"
  } ],
  "success_count" : 1
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2011",
  "error_msg" : "Invalid parameter value: parameter action should be \\\"delete\\\""
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3030",
  "error_msg" : "The instance does not exist;id:eddc4d25480b4cd6b512f270a1b8b341"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error CodesSee [Error Codes](#).

3.14.5 Querying Details of an Access Control Policy

Function

This API is used to query the details of an access control policy.

Calling MethodFor details, see [Calling APIs](#).**URI**

GET /v2/{project_id}/apigw/instances/{instance_id}/acls/{acl_id}

Table 3-770 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
acl_id	Yes	String	Access control policy ID.

Request Parameters

Table 3-771 Request header parameters

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

Response Parameters

Status code: 200

Table 3-772 Response body parameters

Parameter	Type	Description
acl_name	String	Name.
acl_type	String	Type. <ul style="list-style-type: none"> • PERMIT (whitelist) • DENY (blacklist)
acl_value	String	Access control objects.
entity_type	String	Object type. <ul style="list-style-type: none"> • IP • DOMAIN • DOMAIN_ID
id	String	ID.
update_time	String	Update time.

Status code: 400

Table 3-773 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-774 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-775 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-776 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-777 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "id" : "7eb619ecf2a24943b099833cd24a01ba",
  "acl_name" : "acl_demo",
  "entity_type" : "IP",
  "acl_type" : "PERMIT",
  "acl_value" : "192.168.1.5,192.168.10.1",
  "update_time" : "2020-08-04T08:42:43Z"
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2011",
  "error_msg" : "Invalid parameter value,parameterName:id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3006",
  "error_msg" : "Access control policy 7eb619ecf2a24943b099833cd24a01ba does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.14.6 Querying Access Control Policies

Function

This API is used to query all the access control policies.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/acls

Table 3-778 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-779 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20
id	No	String	Access control policy ID.
name	No	String	Access control policy name.
acl_type	No	String	Type. <ul style="list-style-type: none"> • PERMIT (whitelist) • DENY (blacklist)
entity_type	No	String	Object types. <ul style="list-style-type: none"> • IP • DOMAIN
precise_search	No	String	Parameter name (name) for exact matching.

Request Parameters

Table 3-780 Request header parameters

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

Response Parameters

Status code: 200

Table 3-781 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
acls	Array of ApiAclInfoWithBindNum objects	Access control policy list.

Table 3-782 ApiAclInfoWithBindNum

Parameter	Type	Description
acl_name	String	Access control policy name.
acl_type	String	Type. <ul style="list-style-type: none"> PERMIT (whitelist) DENY (blacklist)
acl_value	String	Access control objects.
bind_num	Integer	Number of APIs.
entity_type	String	Object type. <ul style="list-style-type: none"> IP DOMAIN DOMAIN_ID
id	String	Access control policy ID.
update_time	String	Update time.

Status code: 400

Table 3-783 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-784 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-785 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-786 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-787 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total" : 1,
  "size" : 1,
  "acls" : [ {
    "bind_num" : 0,
    "id" : "7eb619ecf2a24943b099833cd24a01ba",
    "acl_name" : "acl_demo",
    "entity_type" : "IP",
    "acl_type" : "PERMIT",
    "acl_value" : "192.168.1.5,192.168.10.1",
    "update_time" : "2020-08-04T08:42:43Z"
  } ]
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2011",
  "error_msg" : "Invalid parameter value,parameterName:name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3030",
  "error_msg" : "The instance does not exist;id:eddc4d25480b4cd6b512f270a1b8b341"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.15 Binding/Unbinding Access Control Policies

3.15.1 Binding an Access Control Policy to an API

Function

This API is used to bind an access control policy to a specified API.

You can bind different access control policies to an API in different environments, but you can bind only one access control policy to the API in each environment.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances/{instance_id}/acl-bindings

Table 3-788 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-789 Request header parameters

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

Table 3-790 Request body parameters

Parameter	Mandatory	Type	Description
acl_id	No	String	Access control policy ID.
publish_ids	No	Array of strings	API publication record ID.

Response Parameters

Status code: 201

Table 3-791 Response body parameters

Parameter	Type	Description
acl_bindings	Array of AclApiBindingInfo objects	Access control policy binding records.

Table 3-792 AclApiBindingInfo

Parameter	Type	Description
id	String	Binding record ID.

Parameter	Type	Description
api_id	String	API ID.
env_id	String	Environment ID.
acl_id	String	Access control policy ID.
create_time	String	Binding time.

Status code: 400

Table 3-793 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-794 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-795 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-796 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Status code: 500

Table 3-797 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Binding an access control policy to an API

```
{
  "acl_id" : "7eb619ecf2a24943b099833cd24a01ba",
  "publish_ids" : [ "40e7162dc6b94b94b94b94b94b94b94b" ]
}
```

Example Responses

Status code: 201

Created

```
{
  "acl_bindings" : [ {
    "id" : "332c5db1458a477b89b2ea741fec94a3",
    "api_id" : "5f918d104dc84480a75166ba99efff21",
    "env_id" : "DEFAULT_ENVIRONMENT_RELEASE_ID",
    "acl_id" : "7eb619ecf2a24943b099833cd24a01ba",
    "create_time" : "2020-08-04T08:58:03.001228747Z"
  } ]
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2011",
  "error_msg" : "Invalid parameter value,parameterName:acl_id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3006",
  "error_msg" : "Access control policy 7eb619ecf2a24943b099833cd24a01ba does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
201	Created
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.15.2 Unbinding an Access Control Policy

Function

This API is used to unbind an access control policy from an API.

Calling Method

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

URI

DELETE /v2/{project_id}/apigw/instances/{instance_id}/acl-bindings/{acl_bindings_id}

Table 3-798 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
acl_bindings_id	Yes	String	Binding record ID.

Request Parameters

Table 3-799 Request header parameters

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

Response Parameters

Status code: 400

Table 3-800 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-801 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-802 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-803 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-804 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2011",
```

```
"error_msg" : "Invalid parameter value,parameterName:id. Please refer to the support documentation"  
}
```

Status code: 401

Unauthorized

```
{  
  "error_code" : "APIG.1002",  
  "error_msg" : "Incorrect token or token resolution failed"  
}
```

Status code: 403

Forbidden

```
{  
  "error_code" : "APIG.1005",  
  "error_msg" : "No permissions to request this method"  
}
```

Status code: 404

Not Found

```
{  
  "error_code" : "APIG.3010",  
  "error_msg" : "The access control policy binding record does not exist"  
}
```

Status code: 500

Internal Server Error

```
{  
  "error_code" : "APIG.9999",  
  "error_msg" : "System error"  
}
```

Status Codes

Status Code	Description
204	No Content
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.15.3 Unbinding Access Control Policies

Function

This API is used to unbind multiple access control policies from APIs.

Calling Method

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

URI

PUT /v2/{project_id}/apigw/instances/{instance_id}/acl-bindings

Table 3-805 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-806 Query Parameters

Parameter	Mandatory	Type	Description
action	Yes	String	The value must be delete.

Request Parameters

Table 3-807 Request header parameters

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

Table 3-808 Request body parameters

Parameter	Mandatory	Type	Description
acl_bindings	No	Array of strings	IDs of the access control policy binding records to be canceled.

Response Parameters

Status code: 200

Table 3-809 Response body parameters

Parameter	Type	Description
success_count	Integer	Number of access control policies that have been successfully unbound.
failure	Array of AclBindingBatchFailure objects	Error message and access control policies that fail to be unbound.

Table 3-810 AclBindingBatchFailure

Parameter	Type	Description
bind_id	String	ID of an access control policy binding record that fails to be canceled.
error_code	String	Error code.
error_msg	String	Error message.
api_id	String	ID of an API from which unbinding fails.
api_name	String	Name of the API from which unbinding fails.

Status code: 400

Table 3-811 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-812 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-813 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-814 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-815 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Unbinding multiple access control policies from APIs

```
{
  "acl_bindings" : [ "332c5db1458a477b89b2ea741fec94a3" ]
}
```

Example Responses

Status code: 200

OK

```
{
  "failure": [ {
    "bind_id": "3a68d39f115d4c128fccd6f624ea6109",
    "error_code": "APIG.3010",
    "error_msg": "The access control policy binding record does not exist"
  } ],
  "success_count": 1
}
```

Status code: 400

Bad Request

```
{
  "error_code": "APIG.2011",
  "error_msg": "Invalid parameter value: parameter action should be \\\"delete\\\""
}
```

Status code: 401

Unauthorized

```
{
  "error_code": "APIG.1002",
  "error_msg": "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code": "APIG.1005",
  "error_msg": "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code": "APIG.3030",
  "error_msg": "The instance does not exist;id:eddc4d25480b4cd6b512f270a1b8b341"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code": "APIG.9999",
  "error_msg": "System error"
}
```

Status Codes

Status Code	Description
200	OK

Status Code	Description
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.15.4 Querying APIs Bound with an Access Control Policy

Function

This API is used to query the APIs to which an access control policy has been bound.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/acl-bindings/binded-apis

Table 3-816 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-817 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20
acl_id	Yes	String	Access control policy ID.
api_id	No	String	API ID.
api_name	No	String	API name.
env_id	No	String	Environment ID.
group_id	No	String	API group ID.

Request Parameters

Table 3-818 Request header parameters

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

Response Parameters

Status code: **200**

Table 3-819 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
apis	Array of AclBindApiInfo objects	API list.

Table 3-820 AclBindApiInfo

Parameter	Type	Description
api_id	String	API ID.
api_name	String	API name.
api_type	Long	API type.
api_remark	String	API description.
env_id	String	ID of the environment in which the policy takes effect.
env_name	String	Name of the environment in which the policy takes effect.
bind_id	String	Binding record ID.
group_name	String	API group name.
bind_time	String	Binding time.
publish_id	String	API publication record ID.
req_method	String	Request method. Enumeration values: <ul style="list-style-type: none"> • GET • POST • DELETE • PUT • PATCH • HEAD • OPTIONS • ANY

Status code: 400

Table 3-821 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-822 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-823 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-824 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-825 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total": 1,
  "size": 1,
  "apis": [ {
    "api_id": "5f918d104dc84480a75166ba99efff21",
    "api_name": "Api_http",
    "group_name": "api_group_001",
    "api_type": 1,
    "api_remark": "Web backend API",
    "env_id": "DEFAULT_ENVIRONMENT_RELEASE_ID",
    "env_name": "RELEASE",
    "bind_id": "332c5db1458a477b89b2ea741fec94a3",
    "bind_time": "2020-08-04T08:58:03Z",
    "publish_id": "40e7162dc6b94b94bbbbb1a60d2a24b1b0c"
  } ]
}
```

Status code: 400

Bad Request

```
{
  "error_code": "APIG.2011",
  "error_msg": "Invalid parameter value,parameterName:api_name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code": "APIG.1002",
  "error_msg": "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code": "APIG.1005",
  "error_msg": "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code": "APIG.3006",
  "error_msg": "Access control policy 7eb619ecf2a24943b099833cd24a01ba does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.15.5 Querying APIs Not Bound with an Access Control Policy

Function

This API is used to query the published APIs to which an access control policy has not been bound.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/acl-bindings/unbound-apis

Table 3-826 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-827 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20
acl_id	Yes	String	Access control policy ID.
api_id	No	String	API ID.
api_name	No	String	API name.
env_id	No	String	Environment ID.
group_id	No	String	API group ID.

Request Parameters

Table 3-828 Request header parameters

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

Response Parameters

Status code: **200**

Table 3-829 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
apis	Array of UnbindApiForAcl objects	API list.

Table 3-830 UnbindApiForAcl

Parameter	Type	Description
id	String	API ID.
name	String	API name.
group_id	String	ID of the API group to which the API belongs.
group_name	String	Name of the API group to which the API belongs.
type	Integer	API visibility.
remark	String	API description.
run_env_name	String	Name of the environment in which the API has been published.
run_env_id	String	ID of the environment in which the API has been published.
publish_id	String	API publication record ID.
acl_name	String	Name of the same type of access control policy bound to the API.
req_uri	String	API request address.
auth_type	String	API authentication mode.

Parameter	Type	Description
req_method	String	Request method. Enumeration values: <ul style="list-style-type: none"> • GET • POST • DELETE • PUT • PATCH • HEAD • OPTIONS • ANY

Status code: 400

Table 3-831 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-832 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-833 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-834 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-835 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total": 1,
  "size": 1,
  "apis": [ {
    "name": "Api_mock",
    "type": 1,
    "remark": "Mock backend API",
    "group_id": "c77f5e81d9cb4424bf704ef2b0ac7600",
    "id": "3a955b791bd24b1c9cd94c745f8d1aad",
    "group_name": "api_group_001",
    "run_env_name": "RELEASE",
    "run_env_id": "DEFAULT_ENVIRONMENT_RELEASE_ID",
    "publish_id": "9f27d1dc4f4242a9abf88e563dbfc33d",
    "req_uri": "/test/mock",
    "auth_type": "IAM"
  } ]
}
```

Status code: 400

Bad Request

```
{
  "error_code": "APIG.2011",
  "error_msg": "Invalid parameter value,parameterName:api_name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized


```
{
  "error_code": "APIG.1002",
  "error_msg": "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code": "APIG.1005",
  "error_msg": "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code": "APIG.3006",
  "error_msg": "Access control policy 7eb619ecf2a24943b099833cd24a01ba does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code": "APIG.9999",
  "error_msg": "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.15.6 Querying Access Control Policies Bound to an API

Function

This API is used to query the access control policies that have been bound to a specified API.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/acl-bindings/binded-acls

Table 3-836 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-837 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20
api_id	Yes	String	API ID.
env_id	No	String	Environment ID.
env_name	No	String	Environment name.
acl_id	No	String	Access control policy ID.
acl_name	No	String	Access control policy name.

Request Parameters

Table 3-838 Request header parameters

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

Response Parameters

Status code: 200

Table 3-839 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
acls	Array of ApiBindAclInfo objects	Access control policy list.

Table 3-840 ApiBindAclInfo

Parameter	Type	Description
acl_id	String	Access control policy ID.
acl_name	String	Access control policy name.
entity_type	String	Object type. Enumeration values: <ul style="list-style-type: none"> • IP • DOMAIN • DOMAIN_ID

Parameter	Type	Description
acl_type	String	Access control type. <ul style="list-style-type: none"> ● PERMIT: whitelist ● DENY: blacklist Enumeration values: <ul style="list-style-type: none"> ● PERMIT ● DENY
acl_value	String	Access control objects.
env_id	String	Effective environment ID.
env_name	String	Effective environment name.
bind_id	String	Binding record ID.
bind_time	String	Binding time.

Status code: 400

Table 3-841 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-842 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-843 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-844 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-845 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total" : 1,
  "size" : 1,
  "acls" : [ {
    "acl_id" : "7eb619ecf2a24943b099833cd24a01ba",
    "acl_name" : "acl_demo",
    "entity_type" : "IP",
    "acl_type" : "PERMIT",
    "acl_value" : "192.168.1.5,192.168.10.1",
    "env_id" : "DEFAULT_ENVIRONMENT_RELEASE_ID",
    "env_name" : "RELEASE",
    "bind_id" : "332c5db1458a477b89b2ea741fec94a3",
    "bind_time" : "2020-08-04T08:58:03Z"
  } ]
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2011",
  "error_msg" : "Invalid parameter value,parameterName:acl_name. Please refer to the support
```

```
documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3002",
  "error_msg" : "API 5f918d104dc84480a75166ba99efff21 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.16 Custom Authorizer Management

3.16.1 Creating a Custom Authorizer

Function

This API is used to create a custom authorizer.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances/{instance_id}/authorizers

Table 3-846 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-847 Request header parameters

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

Table 3-848 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Custom authorizer name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, and underscores (_) are allowed.
type	Yes	String	Custom authorizer type. <ul style="list-style-type: none"> • FRONTEND • BACKEND Modification is not allowed. Enumeration values: <ul style="list-style-type: none"> • FRONTEND • BACKEND
authorizer_type	Yes	String	Value: FUNC. Enumeration values: <ul style="list-style-type: none"> • FUNC
authorizer_uri	Yes	String	Function URN.
network_type	No	String	Function network architecture: <ul style="list-style-type: none"> • V1: non-VPC • V2: VPC Default: V1 Enumeration values: <ul style="list-style-type: none"> • V1 • V2
authorizer_version	No	String	Function version. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored. Maximum: 64
authorizer_alias_uri	No	String	Function alias URN. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored.
identities	No	Array of Identity objects	Identity source.
ttl	No	Integer	Maximum cache age.

Parameter	Mandatory	Type	Description
user_data	No	String	User data.
ld_api_id	No	String	Custom backend ID. Currently, this parameter is not supported.
need_body	No	Boolean	Indicates whether to send the body.

Table 3-849 Identity

Parameter	Mandatory	Type	Description
name	Yes	String	Parameter name.
location	Yes	String	Parameter location. Enumeration values: <ul style="list-style-type: none"> • HEADER • QUERY
validation	No	String	Parameter verification expression. The default value is null, indicating that no verification is performed.

Response Parameters

Status code: 201

Table 3-850 Response body parameters

Parameter	Type	Description
name	String	Custom authorizer name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, and underscores (_) are allowed.
type	String	Custom authorizer type. <ul style="list-style-type: none"> • FRONTEND • BACKEND Modification is not allowed. Enumeration values: <ul style="list-style-type: none"> • FRONTEND • BACKEND

Parameter	Type	Description
authorizer_type	String	Value: FUNC. Enumeration values: <ul style="list-style-type: none"> • FUNC
authorizer_uri	String	Function URN.
network_type	String	Function network architecture: <ul style="list-style-type: none"> • V1: non-VPC • V2: VPC Default: V1 Enumeration values: <ul style="list-style-type: none"> • V1 • V2
authorizer_version	String	Function version. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored. Maximum: 64
authorizer_alias_uri	String	Function alias URN. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored.
identities	Array of Identity objects	Identity source.
ttn	Integer	Maximum cache age.
user_data	String	User data.
ld_api_id	String	Custom backend ID. Currently, this parameter is not supported.
need_body	Boolean	Indicates whether to send the body.
id	String	Custom authorizer ID.
create_time	String	Creation time.
roma_app_id	String	ID of the application to which the custom authorizer belongs. Currently, this parameter is not supported.
roma_app_name	String	Name of the application to which the custom authorizer belongs. Currently, this parameter is not supported.

Table 3-851 Identity

Parameter	Type	Description
name	String	Parameter name.
location	String	Parameter location. Enumeration values: <ul style="list-style-type: none"> • HEADER • QUERY
validation	String	Parameter verification expression. The default value is null, indicating that no verification is performed.

Status code: 400

Table 3-852 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-853 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-854 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-855 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-856 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Creating a frontend custom authorizer

```
{
  "name" : "Authorizer_demo",
  "type" : "FRONTEND",
  "authorizer_type" : "FUNC",
  "authorizer_uri" : "urn:fss:xx-
xxx:106506b9a92342df9a5025fc12351cfc:function:defau:apigDemo_1592617458814",
  "network_type" : "V1",
  "authorizer_version" : "v1",
  "authorizer_alias_uri" : "urn:fss:xx-
xxx-4:106506b9a92342df9a5025fc12351cfc:function:defau:apigDemo_1592617458814:v1",
  "identities" : [ {
    "name" : "header",
    "location" : "HEADER"
  } ],
  "user_data" : "authorizer_test"
}
```

Example Responses

Status code: 201

Created

```
{
  "name" : "Authorizer_demo",
  "type" : "FRONTEND",
  "authorizer_type" : "FUNC",
  "authorizer_uri" : "urn:fss:xx-
xxx-4:106506b9a92342df9a5025fc12351cfc:function:defau:apigDemo_1592617458814",
  "network_type" : "V1",
  "authorizer_version" : "v1",
  "authorizer_alias_uri" : "urn:fss:xx-
xxx-4:106506b9a92342df9a5025fc12351cfc:function:defau:apigDemo_1592617458814:v1",
  "identities" : [ {
    "name" : "header",
    "location" : "HEADER"
  } ],
}
```

```
"ttl" : 0,
"user_data" : "authorizer_test",
"id" : "0d982c1ac3da493dae47627b6439fc5c",
"create_time" : "2020-07-31T11:55:43Z"
}
```

Status code: 400

Bad Request

```
{
"error_code" : "APIG.2011",
"error_msg" : "Invalid parameter value,parameterName:type. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
"error_code" : "APIG.1002",
"error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
"error_code" : "APIG.1005",
"error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
"error_code" : "APIG.3019",
"error_msg" : "The function URN does not exist"
}
```

Status code: 500

Internal Server Error

```
{
"error_code" : "APIG.9999",
"error_msg" : "System error"
}
```

Status Codes

Status Code	Description
201	Created
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found

Status Code	Description
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.16.2 Modifying a Custom Authorizer

Function

This API is used to modify a custom authorizer.

Calling Method

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

URI

PUT /v2/{project_id}/apigw/instances/{instance_id}/authorizers/{authorizer_id}

Table 3-857 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
authorizer_id	Yes	String	Custom authorizer ID.

Request Parameters

Table 3-858 Request header parameters

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

Table 3-859 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Custom authorizer name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, and underscores (_) are allowed.
type	Yes	String	Custom authorizer type. <ul style="list-style-type: none"> • FRONTEND • BACKEND Modification is not allowed. Enumeration values: <ul style="list-style-type: none"> • FRONTEND • BACKEND
authorizer_type	Yes	String	Value: FUNC. Enumeration values: <ul style="list-style-type: none"> • FUNC
authorizer_uri	Yes	String	Function URN.
network_type	No	String	Function network architecture: <ul style="list-style-type: none"> • V1: non-VPC • V2: VPC Default: V1 Enumeration values: <ul style="list-style-type: none"> • V1 • V2
authorizer_version	No	String	Function version. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored. Maximum: 64
authorizer_alias_uri	No	String	Function alias URN. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored.

Parameter	Mandatory	Type	Description
identities	No	Array of Identity objects	Identity source.
ttn	No	Integer	Maximum cache age.
user_data	No	String	User data.
ld_api_id	No	String	Custom backend ID. Currently, this parameter is not supported.
need_body	No	Boolean	Indicates whether to send the body.

Table 3-860 Identity

Parameter	Mandatory	Type	Description
name	Yes	String	Parameter name.
location	Yes	String	Parameter location. Enumeration values: <ul style="list-style-type: none"> • HEADER • QUERY
validation	No	String	Parameter verification expression. The default value is null, indicating that no verification is performed.

Response Parameters

Status code: 200

Table 3-861 Response body parameters

Parameter	Type	Description
name	String	Custom authorizer name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, and underscores (_) are allowed.

Parameter	Type	Description
type	String	Custom authorizer type. <ul style="list-style-type: none"> • FRONTEND • BACKEND Modification is not allowed. Enumeration values: <ul style="list-style-type: none"> • FRONTEND • BACKEND
authorizer_type	String	Value: FUNC. Enumeration values: <ul style="list-style-type: none"> • FUNC
authorizer_uri	String	Function URN.
network_type	String	Function network architecture: <ul style="list-style-type: none"> • V1: non-VPC • V2: VPC Default: V1 Enumeration values: <ul style="list-style-type: none"> • V1 • V2
authorizer_version	String	Function version. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored. Maximum: 64
authorizer_alias_uri	String	Function alias URN. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored.
identities	Array of Identity objects	Identity source.
ttn	Integer	Maximum cache age.
user_data	String	User data.
ld_api_id	String	Custom backend ID. Currently, this parameter is not supported.
need_body	Boolean	Indicates whether to send the body.
id	String	Custom authorizer ID.

Parameter	Type	Description
create_time	String	Creation time.
roma_app_id	String	ID of the application to which the custom authorizer belongs. Currently, this parameter is not supported.
roma_app_name	String	Name of the application to which the custom authorizer belongs. Currently, this parameter is not supported.

Table 3-862 Identity

Parameter	Type	Description
name	String	Parameter name.
location	String	Parameter location. Enumeration values: <ul style="list-style-type: none"> • HEADER • QUERY
validation	String	Parameter verification expression. The default value is null, indicating that no verification is performed.

Status code: 401

Table 3-863 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-864 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-865 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-866 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Updating a frontend custom authorizer

```
{
  "name" : "Authorizer_demo",
  "type" : "FRONTEND",
  "authorizer_type" : "FUNC",
  "authorizer_uri" : "urn:fss:xx-
xxx:106506b9a92342df9a5025fc12351cfc:function:defau:apigDemo_1592617458814",
  "network_type" : "V1",
  "authorizer_version" : "v1",
  "authorizer_alias_uri" : "urn:fss:xx-
xxx-4:106506b9a92342df9a5025fc12351cfc:function:defau:apigDemo_1592617458814:l1",
  "user_data" : "authorizer_test",
  "identities" : [ {
    "name" : "header",
    "location" : "HEADER"
  } ]
}
```

Example Responses

Status code: 200

OK

```
{
  "name" : "Authorizer_demo",
  "type" : "FRONTEND",
  "authorizer_type" : "FUNC",
  "authorizer_uri" : "urn:fss:xx-
xxx-4:106506b9a92342df9a5025fc12351cfc:function:defau:apigDemo_1592617458814",
  "network_type" : "V1",
  "authorizer_version" : "v1",
  "authorizer_alias_uri" : "urn:fss:xx-
xxx-4:106506b9a92342df9a5025fc12351cfc:function:defau:apigDemo_1592617458814:l1",
  "identities" : [ {
```

```

    "name" : "header",
    "location" : "HEADER"
  } ],
  "ttl" : 5,
  "user_data" : "authorizer_test",
  "id" : "0d982c1ac3da493dae47627b6439fc5c",
  "create_time" : "2020-07-08T03:27:52.000+0000"
}

```

Status code: 401

Unauthorized

```

{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}

```

Status code: 403

Forbidden

```

{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}

```

Status code: 404

Not Found

```

{
  "error_code" : "APIG.3081",
  "error_msg" : "authorizer with id: 0d982c1ac3da493dae47627b6439fc5c not found"
}

```

Status code: 500

Internal Server Error

```

{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}

```

Status Codes

Status Code	Description
200	OK
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.16.3 Deleting a Custom Authorizer

Function

This API is used to delete a custom authorizer.

Calling Method

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

URI

DELETE /v2/{project_id}/apigw/instances/{instance_id}/authorizers/{authorizer_id}

Table 3-867 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
authorizer_id	Yes	String	Custom authorizer ID.

Request Parameters

Table 3-868 Request header parameters

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

Response Parameters

Status code: 400

Table 3-869 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-870 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-871 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-872 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-873 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2011",
  "error_msg" : "Invalid parameter value,parameterName:id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3081",
  "error_msg" : "authorizer with id: 0d982c1ac3da493dae47627b6439fc5c not found"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
204	No Content
400	Bad Request
401	Unauthorized
403	Forbidden

Status Code	Description
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.16.4 Querying Custom Authorizer Details

Function

This API is used to query the details of a custom authorizer.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/authorizers/{authorizer_id}

Table 3-874 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
authorizer_id	Yes	String	Custom authorizer ID.

Request Parameters

Table 3-875 Request header parameters

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

Response Parameters

Status code: 200

Table 3-876 Response body parameters

Parameter	Type	Description
name	String	Custom authorizer name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, and underscores (_) are allowed.
type	String	Custom authorizer type. <ul style="list-style-type: none"> FRONTEND BACKEND Modification is not allowed. Enumeration values: <ul style="list-style-type: none"> FRONTEND BACKEND
authorizer_type	String	Value: FUNC. Enumeration values: <ul style="list-style-type: none"> FUNC
authorizer_uri	String	Function URN.
network_type	String	Function network architecture: <ul style="list-style-type: none"> V1: non-VPC V2: VPC Default: V1 Enumeration values: <ul style="list-style-type: none"> V1 V2

Parameter	Type	Description
authorizer_version	String	Function version. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored. Maximum: 64
authorizer_alias_uri	String	Function alias URN. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored.
identities	Array of Identity objects	Identity source.
ttl	Integer	Maximum cache age.
user_data	String	User data.
ld_api_id	String	Custom backend ID. Currently, this parameter is not supported.
need_body	Boolean	Indicates whether to send the body.
id	String	Custom authorizer ID.
create_time	String	Creation time.
roma_app_id	String	ID of the application to which the custom authorizer belongs. Currently, this parameter is not supported.
roma_app_name	String	Name of the application to which the custom authorizer belongs. Currently, this parameter is not supported.

Table 3-877 Identity

Parameter	Type	Description
name	String	Parameter name.
location	String	Parameter location. Enumeration values: <ul style="list-style-type: none"> • HEADER • QUERY
validation	String	Parameter verification expression. The default value is null, indicating that no verification is performed.

Status code: 400

Table 3-878 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-879 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-880 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-881 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-882 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "name" : "Authorizer_demo",
  "type" : "FRONTEND",
  "authorizer_type" : "FUNC",
  "authorizer_uri" : "urn:fss:xx-
xxx-4:106506b9a92342df9a5025fc12351cfc:function:default:apigDemo_1592617458814",
  "network_type" : "V1",
  "authorizer_version" : "v1",
  "authorizer_alias_uri" : "urn:fss:xx-
xxx-4:106506b9a92342df9a5025fc12351cfc:function:default:apigDemo_1592617458814:v1",
  "identities" : [ {
    "name" : "header",
    "location" : "HEADER"
  } ],
  "ttl" : 0,
  "user_data" : "authorizer_test",
  "id" : "0d982c1ac3da493dae47627b6439fc5c",
  "create_time" : "2020-07-31T11:55:43Z"
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2011",
  "error_msg" : "Invalid parameter value,parameterName:type. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3081",
  "error_msg" : "authorizer with id: 0d982c1ac3da493dae47627b6439fc5c not found"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error CodesSee [Error Codes](#).**3.16.5 Querying Custom Authorizers****Function**

This API is used to query all the custom authorizers under a gateway.

Calling MethodFor details, see [Calling APIs](#).**URI**

GET /v2/{project_id}/apigw/instances/{instance_id}/authorizers

Table 3-883 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-884 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20
id	No	String	ID.
name	No	String	Name.
type	No	String	Type.

Request Parameters

Table 3-885 Request header parameters

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

Response Parameters

Status code: 200

Table 3-886 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
authorizer_list	Array of AuthorizerResp objects	Custom authorizers.

Table 3-887 AuthorizerResp

Parameter	Type	Description
name	String	Custom authorizer name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, and underscores (_) are allowed.
type	String	Custom authorizer type. <ul style="list-style-type: none"> • FRONTEND • BACKEND Modification is not allowed. Enumeration values: <ul style="list-style-type: none"> • FRONTEND • BACKEND

Parameter	Type	Description
authorizer_type	String	Value: FUNC. Enumeration values: <ul style="list-style-type: none"> • FUNC
authorizer_uri	String	Function URN.
network_type	String	Function network architecture: <ul style="list-style-type: none"> • V1: non-VPC • V2: VPC Default: V1 Enumeration values: <ul style="list-style-type: none"> • V1 • V2
authorizer_version	String	Function version. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored. Maximum: 64
authorizer_alias_uri	String	Function alias URN. If both a function alias URN and version are passed, the alias URN will be used and the version will be ignored.
identities	Array of Identity objects	Identity source.
ttl	Integer	Maximum cache age.
user_data	String	User data.
ld_api_id	String	Custom backend ID. Currently, this parameter is not supported.
need_body	Boolean	Indicates whether to send the body.
id	String	Custom authorizer ID.
create_time	String	Creation time.
roma_app_id	String	ID of the application to which the custom authorizer belongs. Currently, this parameter is not supported.
roma_app_name	String	Name of the application to which the custom authorizer belongs. Currently, this parameter is not supported.

Table 3-888 Identity

Parameter	Type	Description
name	String	Parameter name.
location	String	Parameter location. Enumeration values: <ul style="list-style-type: none"> • HEADER • QUERY
validation	String	Parameter verification expression. The default value is null, indicating that no verification is performed.

Status code: 400

Table 3-889 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-890 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-891 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-892 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-893 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total": 1,
  "size": 1,
  "authorizer_list": [ {
    "name": "Authorizer_demo",
    "type": "FRONTEND",
    "authorizer_type": "FUNC",
    "authorizer_uri": "urn:fss:xxx-4:106506b9a92342df9a5025fc12351cfc:function:default:apigDemo_1592617458814",
    "network_type": "V1",
    "authorizer_version": "v1",
    "authorizer_alias_uri": "urn:fss:xxx-4:106506b9a92342df9a5025fc12351cfc:function:default:apigDemo_1592617458814:v1",
    "identities": [ {
      "name": "header",
      "location": "HEADER"
    } ],
    "ttl": 0,
    "user_data": "authorizer_test",
    "id": "0d982c1ac3da493dae47627b6439fc5c",
    "create_time": "2020-07-31T11:55:43Z"
  } ]
}
```

Status code: 400

Bad Request

```
{
  "error_code": "APIG.2011",
```

```
{
  "error_msg": "Invalid parameter value,parameterName:name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code": "APIG.1002",
  "error_msg": "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code": "APIG.1005",
  "error_msg": "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code": "APIG.3030",
  "error_msg": "The instance does not exist;id:eddc4d25480b4cd6b512f270a1b8b341"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code": "APIG.9999",
  "error_msg": "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.17 API Import and Export

3.17.1 Exporting APIs

Function

This API is used to export APIs in a specified API group. The content of the exported file complies with the Swagger standard. For details about the custom extended fields of APIG, see section "Importing and Exporting APIs: Extended Definition" in the Developer Guide.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances/{instance_id}/openapi/export

Table 3-894 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-895 Query Parameters

Parameter	Mandatory	Type	Description
oas_version	No	String	Open API version. Default: 2.0 Enumeration values: <ul style="list-style-type: none"> • 2.0 • 3.0

Request Parameters

Table 3-896 Request header parameters

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

Table 3-897 Request body parameters

Parameter	Mandatory	Type	Description
env_id	Yes	String	ID of the environment in which APIs of a group have been published.
group_id	Yes	String	API group ID.
define	No	String	<p>Definition scope of the APIs to be exported:</p> <ul style="list-style-type: none"> • spec: basic definitions, including only the frontend definitions. • proxy: full definitions, including the frontend and backend definitions. • all: extended definitions, including the frontend and backend definitions as well as request throttling policies, access control policies, and custom authorizers. • dev: development definitions, including the frontend and backend definitions of APIs that have not been published. <p>Default: spec</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • spec • proxy • all • dev

Parameter	Mandatory	Type	Description
type	No	String	Format for exporting API definitions. Default: json Enumeration values: <ul style="list-style-type: none"> • json • yaml • yml
version	No	String	Version number of the APIs after exporting. The default value is the current date and time.
apis	No	Array of strings	IDs of the APIs to be exported.

Response Parameters

Status code: 200

Table 3-898 Response body parameters

Parameter	Type	Description
-	File	OK

Status code: 400

Table 3-899 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-900 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-901 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-902 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-903 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Exporting APIs

```
{
  "env_id" : "DEFAULT_ENVIRONMENT_RELEASE_ID",
  "group_id" : "c77f5e81d9cb4424bf704ef2b0ac7600",
  "define" : "all"
}
```

Example Responses

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2001",
  "error_msg" : "The request parameters must be specified,parameterName:env_id. Please refer to the
```

```
support_documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3001",
  "error_msg" : "API group c77f5e81d9cb4424bf704ef2b0ac7600 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.17.2 Importing APIs

Function

This API is used to import APIs. The content of the imported file must comply with the Swagger standard. For details about the custom extended fields, see section "Importing and Exporting APIs: Extended Definition" in the Developer Guide.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances/{instance_id}/openapi/import

Table 3-904 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-905 Request header parameters

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

Table 3-906 FormData parameters

Parameter	Mandatory	Type	Description
is_create_group	No	Boolean	Specifies whether to create an API group. Default: true

Parameter	Mandatory	Type	Description
group_id	No	String	API group ID. This parameter is required if is_create_group is set to false.
extend_mode	No	String	Import mode of extended information. <ul style="list-style-type: none"> merge: Retain the original extended information if a conflict occurs. override: Override the original extended information if a conflict occurs. Default: merge Enumeration values: <ul style="list-style-type: none"> merge override
simple_mode	No	Boolean	Specifies whether to enable fast import. Default: false
mock_mode	No	Boolean	Specifies whether to enable the Mock backend. Default: false
api_mode	No	String	Import mode. <ul style="list-style-type: none"> merge: Retain the original API information if a conflict occurs. override: Override the original API information if a conflict occurs. Default: merge Enumeration values: <ul style="list-style-type: none"> merge override
file_name	Yes	File	Request body in JSON or YAML format for importing APIs.

Response Parameters

Status code: 200

Table 3-907 Response body parameters

Parameter	Type	Description
success	Array of Success objects	Import success information.
failure	Array of Failure objects	Import failure information.
swagger	Swagger object	Swagger file import result. Currently, this parameter is not supported.
group_id	String	API group ID.
ignore	Array of Ignore objects	APIs that are not imported.

Table 3-908 Success

Parameter	Type	Description
path	String	API request path.
method	String	API request method.
action	String	Import type. Options: <ul style="list-style-type: none"> • update: Update the APIs to an existing API group. • create: Create APIs for a new API group. Enumeration values: <ul style="list-style-type: none"> • update • create
id	String	ID of a successfully imported API.

Table 3-909 Failure

Parameter	Type	Description
path	String	API request path.
error_msg	String	Error message displayed for an import failure.
method	String	API request method.
error_code	String	Error code displayed for an import failure.

Table 3-910 Swagger

Parameter	Type	Description
id	String	Swagger file No.
result	String	Import result description.

Table 3-911 Ignore

Parameter	Type	Description
method	String	API request method.
path	String	API request path.

Status code: 400

Table 3-912 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-913 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-914 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-915 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-916 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Importing APIs

```
{
  "is_create_group" : false,
  "group_id" : "d9ce8c9eede54b3f841ec324fe0bfdc2",
  "file_name" : "APIGroup_test.json"
}
```

Example Responses

Status code: 200

OK

```
{
  "group_id" : "d9ce8c9eede54b3f841ec324fe0bfdc2",
  "failure" : [ {
    "path" : "/test/demo",
    "error_msg" : "The API already exists, An API with the same combination of the method, path, and x-apigateway-match-mode fields already exists. API name: API_demo",
    "method" : "GET",
    "error_code" : "APIG.3301"
  } ],
  "success" : [ {
    "path" : "/test",
    "method" : "GET",
    "action" : "create",
    "id" : "8ae6bcfab6f49d78242bff26ad8a4f0"
  } ],
  "swagger" : {
    "id" : "e2ea8a7c1cfc49b3830437cb79d7fd59",
    "result" : "Success"
  }
}
```

Status code: 400

Bad Request

```
{  
  "error_code" : "APIG.3201",  
  "error_msg" : "The API group name already exists"  
}
```

Status code: 401

Unauthorized

```
{  
  "error_code" : "APIG.1002",  
  "error_msg" : "Incorrect token or token resolution failed"  
}
```

Status code: 403

Forbidden

```
{  
  "error_code" : "APIG.1005",  
  "error_msg" : "No permissions to request this method"  
}
```

Status code: 404

Not Found

```
{  
  "error_code" : "APIG.3001",  
  "error_msg" : "API group not found"  
}
```

Status code: 500

Internal Server Error

```
{  
  "error_code" : "APIG.9999",  
  "error_msg" : "System error"  
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.18 VPC Channel Management

3.18.1 Creating a VPC Channel

Function

This API is used to create a VPC channel from APIG to your private VPC resources. Afterwards, when creating an API, you can configure your backend service to use this VPC channel so that APIG can directly access your private VPC resources.

NOTE

You can create a maximum of 30 VPC channels.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances/{instance_id}/vpc-channels

Table 3-917 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-918 Request header parameters

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

Table 3-919 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	VPC channel name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, hyphens (-), underscores (_), and periods (.) are allowed.
port	Yes	Integer	Host port of the VPC channel. Range: 1–65535.
balance_strategy	Yes	Integer	Distribution algorithm. <ul style="list-style-type: none"> • 1: Weighted round robin (WRR). • 2: Weighted least connections (WLC). • 3: Source hashing. • 4: URI hashing. Default: 1 Enumeration values: <ul style="list-style-type: none"> • 1 • 2 • 3 • 4
member_type	Yes	String	Member type of the VPC channel. <ul style="list-style-type: none"> • ip • ecs Default: ecs Enumeration values: <ul style="list-style-type: none"> • ip • ecs
type	No	Integer	VPC channel type. The default type is server. <ul style="list-style-type: none"> • 2: Server type. • 3: Microservice type. Default: 2 Enumeration values: <ul style="list-style-type: none"> • 2 • 3

Parameter	Mandatory	Type	Description
dict_code	No	String	Dictionary code of the VPC channel. The value can contain letters, digits, hyphens (-), underscores (_), and periods (.). This parameter is currently not supported. Minimum: 3 Maximum: 64
member_groups	No	Array of MemberGroupCreate objects	Backend server groups of the VPC channel.
members	No	Array of MemberInfo objects	Backend instances of the VPC channel.
vpc_health_config	No	VpcHealthConfig object	Health check details.
microservice_info	No	MicroServiceCreate object	Microservice details.

Table 3-920 MemberGroupCreate

Parameter	Mandatory	Type	Description
member_group_name	Yes	String	Name of the VPC channel's backend server group. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, underscores (_), hyphens (-), and periods (.) are allowed.
member_group_remark	No	String	Description of the backend server group. Maximum: 255

Parameter	Mandatory	Type	Description
member_group_weight	No	Integer	Weight of the backend server group. If the server group contains servers and a weight has been set for it, the weight is automatically used to assign weights to servers in this group. Minimum: 0 Maximum: 100
dict_code	No	String	Dictionary code of the backend server group. The value can contain letters, digits, hyphens (-), underscores (_), and periods (.). Currently, this parameter is not supported. Minimum: 3 Maximum: 64
microservice_version	No	String	Version of the backend server group. This parameter is supported only when the VPC channel type is microservice. Maximum: 64
microservice_port	No	Integer	Port of the backend server group. This parameter is supported only when the VPC channel type is microservice. If the port number is 0, all addresses in the backend server group use the original load balancing port to inherit logic. Minimum: 0 Maximum: 65535
microservice_labels	No	Array of MicroserviceLabel objects	Tags of the backend server group. This parameter is supported only when the VPC channel type is microservice.

Table 3-921 MicroserviceLabel

Parameter	Mandatory	Type	Description
label_name	Yes	String	Tag name. Start and end with a letter or digit. Use only letters, digits, hyphens (-), underscores (_), and periods (.). (Max. 63 characters.) Minimum: 1 Maximum: 63
label_value	Yes	String	Tag value. Start and end with a letter or digit. Use only letters, digits, hyphens (-), underscores (_), and periods (.). (Max. 63 characters.) Minimum: 1 Maximum: 63

Table 3-922 MemberInfo

Parameter	Mandatory	Type	Description
host	No	String	Backend server address. This parameter is required when the member type is IP address. Maximum: 64
weight	No	Integer	Weight. The higher the weight is, the more requests a backend service will receive. Minimum: 0 Maximum: 10000

Parameter	Mandatory	Type	Description
is_backup	No	Boolean	<p>Indicates whether the backend service is a standby node.</p> <p>After you enable this function, the backend service serves as a standby node. It works only when all non-standby nodes are faulty.</p> <p>This function is supported only when your gateway has been upgraded to the corresponding version. If your gateway does not support this function, contact technical support.</p> <p>Default: false</p>
member_group_name	No	String	Backend server group name. The server group facilitates backend service address modification.
status	No	Integer	<p>Backend server status.</p> <ul style="list-style-type: none"> • 1: available • 2: unavailable <p>Enumeration values:</p> <ul style="list-style-type: none"> • 1 • 2
port	No	Integer	<p>Backend server port.</p> <p>Minimum: 0</p> <p>Maximum: 65535</p>
ecs_id	No	String	<p>Backend server ID.</p> <p>This parameter is required if the backend instance type is ecs. The value can contain 1 to 64 characters, including letters, digits, hyphens (-), and underscores (_).</p> <p>Maximum: 255</p>

Parameter	Mandatory	Type	Description
ecs_name	No	String	Backend server name. This parameter is required if the backend instance type is ecs. The value can contain 1 to 64 characters, including letters, digits, hyphens (-), underscores (_), and periods (.). Maximum: 64

Table 3-923 VpcHealthConfig

Parameter	Mandatory	Type	Description
protocol	Yes	String	Protocol for performing health checks on backend servers in the VPC channel. <ul style="list-style-type: none"> • TCP • HTTP • HTTPS Enumeration values: <ul style="list-style-type: none"> • TCP • HTTP • HTTPS
path	No	String	Destination path for health checks. This parameter is required if protocol is set to http or https.
method	No	String	Request method for health checks. Default: GET Enumeration values: <ul style="list-style-type: none"> • GET • HEAD

Parameter	Mandatory	Type	Description
port	No	Integer	<p>Destination port for health checks. If this parameter is not specified or set to 0, the host port of the VPC channel is used.</p> <p>If this parameter is set to a non-zero value, the corresponding port is used for health checks.</p> <p>Minimum: 0 Maximum: 65535</p>
threshold_normal	Yes	Integer	<p>Healthy threshold. It refers to the number of consecutive successful checks required for a backend server to be considered healthy.</p> <p>Minimum: 1 Maximum: 10</p>
threshold_abnormal	Yes	Integer	<p>Unhealthy threshold, which refers to the number of consecutive failed checks required for a backend server to be considered unhealthy.</p> <p>Minimum: 1 Maximum: 10</p>
time_interval	Yes	Integer	<p>Interval between consecutive checks. Unit: s. The value must be greater than the value of timeout.</p> <p>Minimum: 1 Maximum: 300</p>

Parameter	Mandatory	Type	Description
http_code	No	String	Response codes for determining a successful HTTP response. The value can be any integer within 100–599 in one of the following formats: <ul style="list-style-type: none"> • Multiple values, for example, 200,201,202 • Range, for example, 200-299 • Multiple values and ranges, for example, 201,202,210-299. This parameter is required if protocol is set to http.
enable_client_ssl	No	Boolean	Indicates whether to enable two-way authentication. If this function is enabled, the certificate specified in the backend_client_certificate configuration item of the gateway is used. Default: false
status	No	Integer	Health check result. <ul style="list-style-type: none"> • 1: available • 2: unavailable Enumeration values: <ul style="list-style-type: none"> • 1 • 2
timeout	Yes	Integer	Timeout for determining whether a health check fails. Unit: s. The value must be less than the value of time_interval. Minimum: 1 Maximum: 30

Table 3-924 MicroServiceCreate

Parameter	Mandatory	Type	Description
service_type	No	String	Microservice type. Options: <ul style="list-style-type: none"> • CSE: CSE microservice registration center • CCE: CCE workload • CCE_SERVICE: CCE Service Enumeration values: <ul style="list-style-type: none"> • CSE • CCE • CCE_SERVICE
cse_info	No	MicroServiceInfoCSEBase object	CSE microservice details. This parameter is required if service_type is set to CSE.
cce_info	No	MicroServiceInfoCCEBase object	CCE workload details. This parameter is required if service_type is set to CCE. Either app_name or any of label_key and label_value must be set. If only app_name is set, label_key='app' and label_value=app_name.
cce_service_info	No	MicroServiceInfoCCEServiceBase object	CCE Service details.

Table 3-925 MicroServiceInfoCSEBase

Parameter	Mandatory	Type	Description
engine_id	Yes	String	Microservice engine ID. Maximum: 64
service_id	Yes	String	Microservice ID. Maximum: 64

Table 3-926 MicroServiceInfoCCEBase

Parameter	Mandatory	Type	Description
cluster_id	Yes	String	CCE cluster ID. Maximum: 64

Parameter	Mandatory	Type	Description
namespace	Yes	String	Namespace. Maximum: 64
workload_type	Yes	String	Workload type. <ul style="list-style-type: none"> • deployment • statefulset • daemonset Enumeration values: <ul style="list-style-type: none"> • deployment • statefulset • daemonset
app_name	No	String	App name. Start with a letter, and include only letters, digits, periods (.), hyphens (-), and underscores (_). (1 to 64 characters) Minimum: 1 Maximum: 64
label_key	No	String	Service label key. Start with a letter or digit, and use only letters, digits, and these special characters: -_/:(). (1 to 64 characters) Minimum: 1 Maximum: 64
label_value	No	String	Service label value. Start with a letter, and include only letters, digits, periods (.), hyphens (-), and underscores (_). (1 to 64 characters) Minimum: 1 Maximum: 64

Table 3-927 MicroServiceInfoCCEServiceBase

Parameter	Mandatory	Type	Description
cluster_id	Yes	String	CCE cluster ID. Maximum: 64

Parameter	Mandatory	Type	Description
namespace	Yes	String	Namespace. 1 to 63 characters. Use lowercase letters, digits, and hyphens (-). Start with a letter and end with a letter or digit. Minimum: 1 Maximum: 63
service_name	Yes	String	Service name. Start with a letter, and use only letters, digits, periods (.), hyphens (-), and underscores (_). (1 to 64 characters) Minimum: 1 Maximum: 64

Response Parameters

Status code: 201

Table 3-928 Response body parameters

Parameter	Type	Description
name	String	VPC channel name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, hyphens (-), underscores (_), and periods (.) are allowed.
port	Integer	Host port of the VPC channel. Range: 1–65535.
balance_strategy	Integer	Distribution algorithm. <ul style="list-style-type: none"> • 1: Weighted round robin (WRR). • 2: Weighted least connections (WLC). • 3: Source hashing. • 4: URI hashing. Default: 1 Enumeration values: <ul style="list-style-type: none"> • 1 • 2 • 3 • 4

Parameter	Type	Description
member_type	String	Member type of the VPC channel. <ul style="list-style-type: none"> ip ecs Default: ecs Enumeration values: <ul style="list-style-type: none"> ip ecs
type	Integer	VPC channel type. The default type is server. <ul style="list-style-type: none"> 2: Server type. 3: Microservice type. Default: 2 Enumeration values: <ul style="list-style-type: none"> 2 3
dict_code	String	Dictionary code of the VPC channel. The value can contain letters, digits, hyphens (-), underscores (_), and periods (.). This parameter is currently not supported. Minimum: 3 Maximum: 64
create_time	String	Time when the VPC channel is created.
id	String	VPC channel ID.
status	Integer	VPC channel status. <ul style="list-style-type: none"> 1: normal 2: abnormal Enumeration values: <ul style="list-style-type: none"> 1 2
member_groups	Array of MemberGroupInfo objects	Backend server groups.
microservice_info	MicroServiceInfo object	Microservice information.

Table 3-929 MemberGroupInfo

Parameter	Type	Description
member_group_name	String	Name of the VPC channel's backend server group. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, underscores (_), hyphens (-), and periods (.) are allowed.
member_group_remark	String	Description of the backend server group. Maximum: 255
member_group_weight	Integer	Weight of the backend server group. If the server group contains servers and a weight has been set for it, the weight is automatically used to assign weights to servers in this group. Minimum: 0 Maximum: 100
dict_code	String	Dictionary code of the backend server group. The value can contain letters, digits, hyphens (-), underscores (_), and periods (.). Currently, this parameter is not supported. Minimum: 3 Maximum: 64
microservice_version	String	Version of the backend server group. This parameter is supported only when the VPC channel type is microservice. Maximum: 64
microservice_port	Integer	Port of the backend server group. This parameter is supported only when the VPC channel type is microservice. If the port number is 0, all addresses in the backend server group use the original load balancing port to inherit logic. Minimum: 0 Maximum: 65535
microservice_labels	Array of MicroserviceLabel objects	Tags of the backend server group. This parameter is supported only when the VPC channel type is microservice.
member_group_id	String	ID of the backend server group of the VPC channel.
create_time	String	Time when the backend server group is created.

Parameter	Type	Description
update_time	String	Time when the backend server group is updated.

Table 3-930 MicroserviceLabel

Parameter	Type	Description
label_name	String	Tag name. Start and end with a letter or digit. Use only letters, digits, hyphens (-), underscores (_), and periods (.). (Max. 63 characters.) Minimum: 1 Maximum: 63
label_value	String	Tag value. Start and end with a letter or digit. Use only letters, digits, hyphens (-), underscores (_), and periods (.). (Max. 63 characters.) Minimum: 1 Maximum: 63

Table 3-931 MicroServiceInfo

Parameter	Type	Description
id	String	Microservice ID.
instance_id	String	Gateway ID.
service_type	String	Microservice type. Options: <ul style="list-style-type: none"> • CSE: CSE microservice registration center • CCE: CCE workload • CCE_SERVICE: CCE Service Enumeration values: <ul style="list-style-type: none"> • CSE • CCE • CCE_SERVICE
cse_info	MicroServiceInfoCSE object	CSE microservice details.
cce_info	MicroServiceInfoCCE object	CCE microservice workload details.

Parameter	Type	Description
cce_service_info	MicroServiceInfoCCEService object	CCE microservice Service details.
update_time	String	Microservice update time.
create_time	String	Microservice creation time.

Table 3-932 MicroServiceInfoCSE

Parameter	Type	Description
engine_id	String	Microservice engine ID. Maximum: 64
service_id	String	Microservice ID. Maximum: 64
engine_name	String	Microservice engine name.
service_name	String	Microservice name.
register_addresses	String	Registration center address.
cse_app_id	String	App to which the microservice belongs.
version	String	Microservice version, which has been discarded and is reflected in the version of the backend server group. Maximum: 64

Table 3-933 MicroServiceInfoCCE

Parameter	Type	Description
cluster_id	String	CCE cluster ID. Maximum: 64
namespace	String	Namespace. Maximum: 64

Parameter	Type	Description
workload_type	String	Workload type. <ul style="list-style-type: none"> • deployment • statefulset • daemonset Enumeration values: <ul style="list-style-type: none"> • deployment • statefulset • daemonset
app_name	String	App name. Start with a letter, and include only letters, digits, periods (.), hyphens (-), and underscores (_). (1 to 64 characters) Minimum: 1 Maximum: 64
label_key	String	Service label key. Start with a letter or digit, and use only letters, digits, and these special characters: -_/:(). (1 to 64 characters) Minimum: 1 Maximum: 64
label_value	String	Service label value. Start with a letter, and include only letters, digits, periods (.), hyphens (-), and underscores (_). (1 to 64 characters) Minimum: 1 Maximum: 64
cluster_name	String	CCE cluster name.

Table 3-934 MicroServiceInfoCCEService

Parameter	Type	Description
cluster_id	String	CCE cluster ID. Maximum: 64
namespace	String	Namespace. 1 to 63 characters. Use lowercase letters, digits, and hyphens (-). Start with a letter and end with a letter or digit. Minimum: 1 Maximum: 63

Parameter	Type	Description
service_name	String	Service name. Start with a letter, and use only letters, digits, periods (.), hyphens (-), and underscores (_). (1 to 64 characters) Minimum: 1 Maximum: 64
cluster_name	String	CCE cluster name.

Status code: 400

Table 3-935 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-936 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-937 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-938 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-939 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

- Creating a VPC channel of the server type

```
{
  "balance_strategy" : 1,
  "member_type" : "ip",
  "name" : "VPC_demo",
  "port" : 22,
  "type" : 2,
  "vpc_health_config" : {
    "http_code" : "200",
    "path" : "/vpc/demo",
    "port" : 22,
    "protocol" : "http",
    "threshold_abnormal" : 5,
    "threshold_normal" : 2,
    "time_interval" : 10,
    "timeout" : 5,
    "enable_client_ssl" : false
  },
  "member_groups" : [ {
    "member_group_name" : "test",
    "member_group_weight" : 1,
    "member_group_remark" : "remark"
  }, {
    "member_group_name" : "default",
    "member_group_weight" : 2,
    "member_group_remark" : "remark"
  } ],
  "members" : [ {
    "host" : "192.168.0.5",
    "weight" : 1,
    "member_group_name" : "test"
  }, {
    "host" : "192.168.1.124",
    "weight" : 2,
    "member_group_name" : "default"
  } ]
}
```

- Creating a VPC channel of the microservice type

```
{
  "balance_strategy" : 1,
```

```
"member_type": "ip",
"name": "VPC_demo",
"port": 22,
"type": 3,
"vpc_health_config": {
  "http_code": "200",
  "path": "/vpc/demo",
  "port": 22,
  "protocol": "http",
  "threshold_abnormal": 5,
  "threshold_normal": 2,
  "time_interval": 10,
  "timeout": 5,
  "enable_client_ssl": false
},
"member_groups": [ {
  "member_group_name": "test",
  "member_group_weight": 1,
  "member_group_remark": "remark",
  "microservice_version": "v1",
  "microservice_port": 80
}, {
  "member_group_name": "default",
  "member_group_weight": 2,
  "member_group_remark": "remark",
  "microservice_version": "v2",
  "microservice_port": 80,
  "microservice_labels": [ {
    "label_name": "cluster_id",
    "label_value": "c429700c-5dc4-482a-9c0e-99f6c0635113"
  } ]
} ],
"members": [ {
  "host": "192.168.0.5",
  "weight": 1,
  "member_group_name": "test"
}, {
  "host": "192.168.1.124",
  "weight": 2,
  "member_group_name": "default"
} ],
"microservice_info": {
  "service_type": "CCE",
  "cce_info": {
    "cluster_id": "ab1485b4f91b45abbcd560be591f7309",
    "namespace": "default",
    "workload_type": "deployment",
    "app_name": "testapp"
  }
}
}
```

Example Responses

Status code: 201

Created

- Example 1

```
{
  "name": "VPC_demo",
  "id": "105c6902457144a4820dff8b1ad63331",
  "balance_strategy": 1,
  "dict_code": "",
  "create_time": "2020-07-23T07:11:57.244829604Z",
  "member_type": "ip",
  "port": 22,
  "status": 1,
}
```

```

"member_groups" : [ {
  "member_group_id" : "c1ce135c705c4066853a0460b318fe16",
  "member_group_name" : "test",
  "member_group_weight" : 1,
  "member_group_remark" : "remark",
  "create_time" : "2020-07-23T07:11:57.244829604Z",
  "update_time" : "2020-07-23T07:11:57.244829604Z",
  "microservice_version" : "",
  "microservice_port" : 0
}, {
  "member_group_id" : "c1ce135c705c4066853a0460b318fe17",
  "member_group_name" : "default",
  "member_group_weight" : 2,
  "member_group_remark" : "remark",
  "create_time" : "2020-07-23T07:11:57.244829604Z",
  "update_time" : "2020-07-23T07:11:57.244829604Z",
  "microservice_version" : "",
  "microservice_port" : 0
}],
"type" : 2,
"microservice_info" : {
  "id" : "",
  "instance_id" : "",
  "service_type" : "",
  "cse_info" : {
    "cse_app_id" : "",
    "engine_id" : "",
    "engine_name" : "",
    "register_address" : "",
    "service_id" : "",
    "service_name" : ""
  },
  "cce_info" : {
    "cluster_id" : "",
    "cluster_name" : "",
    "namespace" : "",
    "workload_type" : "",
    "app_name" : ""
  },
  "create_time" : "",
  "update_time" : ""
}
}

```

- Example 2

```

{
  "name" : "VPC_demo",
  "id" : "105c6902457144a4820dff8b1ad63331",
  "balance_strategy" : 1,
  "dict_code" : "",
  "create_time" : "2020-07-23T07:11:57.244829604Z",
  "member_type" : "ip",
  "port" : 22,
  "status" : 1,
  "member_groups" : [ {
    "member_group_id" : "c1ce135c705c4066853a0460b318fe16",
    "member_group_name" : "test",
    "member_group_weight" : 1,
    "member_group_remark" : "remark",
    "create_time" : "2020-07-23T07:11:57.244829604Z",
    "update_time" : "2020-07-23T07:11:57.244829604Z",
    "microservice_version" : "v1",
    "microservice_port" : 80
  }, {
    "member_group_id" : "c1ce135c705c4066853a0460b318fe17",
    "member_group_name" : "default",
    "member_group_weight" : 2,
    "member_group_remark" : "remark",
    "create_time" : "2020-07-23T07:11:57.244829604Z",
    "update_time" : "2020-07-23T07:11:57.244829604Z",
  }
}

```

```
"microservice_version" : "v2",
"microservice_port" : 80,
"microservice_labels" : [ {
  "label_name" : "cluster_id",
  "label_value" : "c429700c-5dc4-482a-9c0e-99f6c0635113"
} ]
},
"type" : 3,
"microservice_info" : {
  "id" : "9483afa235be45158a70c19ab817ac65",
  "instance_id" : "eddc4d25480b4cd6b512f270a1b8b341",
  "service_type" : "CCE",
  "cse_info" : {
    "cse_app_id" : "",
    "engine_id" : "",
    "engine_name" : "",
    "register_address" : "",
    "service_id" : "",
    "service_name" : ""
  },
  "cce_info" : {
    "cluster_id" : "ab1485b4f91b45abbc560be591f7309",
    "cluster_name" : "cce-test",
    "namespace" : "default",
    "workload_type" : "deployment",
    "app_name" : "testapp"
  },
  "create_time" : "2020-07-23T07:11:57.244829604Z",
  "update_time" : "2020-07-23T07:11:57.244829604Z"
}
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2001",
  "error_msg" : "The request parameters must be specified, parameter name:members"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3030",
  "error_msg" : "The instance does not exist;id:eddc4d25480b4cd6b512f270a1b8b341"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
201	Created
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.18.2 Updating a VPC Channel

Function

This API is used to update the parameters of a VPC channel.

If the VPC channel is overwritten with an empty backend instance list, all the existing backend instances will be deleted.

If the VPC channel is overwritten with an empty backend server group list, all the existing backend server groups will be deleted.

Calling Method

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

URI

PUT /v2/{project_id}/apigw/instances/{instance_id}/vpc-channels/{vpc_channel_id}

Table 3-940 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
vpc_channel_id	Yes	String	VPC channel ID.

Request Parameters

Table 3-941 Request header parameters

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

Table 3-942 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	VPC channel name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, hyphens (-), underscores (_), and periods (.) are allowed.
port	Yes	Integer	Host port of the VPC channel. Range: 1–65535.

Parameter	Mandatory	Type	Description
balance_strategy	Yes	Integer	<p>Distribution algorithm.</p> <ul style="list-style-type: none"> • 1: Weighted round robin (WRR). • 2: Weighted least connections (WLC). • 3: Source hashing. • 4: URI hashing. <p>Default: 1</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • 1 • 2 • 3 • 4
member_type	Yes	String	<p>Member type of the VPC channel.</p> <ul style="list-style-type: none"> • ip • ecs <p>Default: ecs</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • ip • ecs
type	No	Integer	<p>VPC channel type. The default type is server.</p> <ul style="list-style-type: none"> • 2: Server type. • 3: Microservice type. <p>Default: 2</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • 2 • 3
dict_code	No	String	<p>Dictionary code of the VPC channel.</p> <p>The value can contain letters, digits, hyphens (-), underscores (_), and periods (.).</p> <p>This parameter is currently not supported.</p> <p>Minimum: 3</p> <p>Maximum: 64</p>

Parameter	Mandatory	Type	Description
member_groups	No	Array of MemberGroupCreate objects	Backend server groups of the VPC channel.
members	No	Array of MemberInfo objects	Backend instances of the VPC channel.
vpc_health_config	No	VpcHealthConfig object	Health check details.
microservice_info	No	MicroServiceCreate object	Microservice details.

Table 3-943 MemberGroupCreate

Parameter	Mandatory	Type	Description
member_group_name	Yes	String	Name of the VPC channel's backend server group. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, underscores (_), hyphens (-), and periods (.) are allowed.
member_group_remark	No	String	Description of the backend server group. Maximum: 255
member_group_weight	No	Integer	Weight of the backend server group. If the server group contains servers and a weight has been set for it, the weight is automatically used to assign weights to servers in this group. Minimum: 0 Maximum: 100

Parameter	Mandatory	Type	Description
dict_code	No	String	Dictionary code of the backend server group. The value can contain letters, digits, hyphens (-), underscores (_), and periods (.). Currently, this parameter is not supported. Minimum: 3 Maximum: 64
microservice_version	No	String	Version of the backend server group. This parameter is supported only when the VPC channel type is microservice. Maximum: 64
microservice_port	No	Integer	Port of the backend server group. This parameter is supported only when the VPC channel type is microservice. If the port number is 0, all addresses in the backend server group use the original load balancing port to inherit logic. Minimum: 0 Maximum: 65535
microservice_labels	No	Array of MicroserviceLabel objects	Tags of the backend server group. This parameter is supported only when the VPC channel type is microservice.

Table 3-944 MicroserviceLabel

Parameter	Mandatory	Type	Description
label_name	Yes	String	Tag name. Start and end with a letter or digit. Use only letters, digits, hyphens (-), underscores (_), and periods (.). (Max. 63 characters.) Minimum: 1 Maximum: 63

Parameter	Mandatory	Type	Description
label_value	Yes	String	<p>Tag value.</p> <p>Start and end with a letter or digit. Use only letters, digits, hyphens (-), underscores (_), and periods (.). (Max. 63 characters.)</p> <p>Minimum: 1</p> <p>Maximum: 63</p>

Table 3-945 MemberInfo

Parameter	Mandatory	Type	Description
host	No	String	<p>Backend server address.</p> <p>This parameter is required when the member type is IP address.</p> <p>Maximum: 64</p>
weight	No	Integer	<p>Weight.</p> <p>The higher the weight is, the more requests a backend service will receive.</p> <p>Minimum: 0</p> <p>Maximum: 10000</p>
is_backup	No	Boolean	<p>Indicates whether the backend service is a standby node.</p> <p>After you enable this function, the backend service serves as a standby node. It works only when all non-standby nodes are faulty.</p> <p>This function is supported only when your gateway has been upgraded to the corresponding version. If your gateway does not support this function, contact technical support.</p> <p>Default: false</p>
member_group_name	No	String	<p>Backend server group name.</p> <p>The server group facilitates backend service address modification.</p>

Parameter	Mandatory	Type	Description
status	No	Integer	Backend server status. <ul style="list-style-type: none"> • 1: available • 2: unavailable Enumeration values: <ul style="list-style-type: none"> • 1 • 2
port	No	Integer	Backend server port. Minimum: 0 Maximum: 65535
ecs_id	No	String	Backend server ID. This parameter is required if the backend instance type is ecs. The value can contain 1 to 64 characters, including letters, digits, hyphens (-), and underscores (_). Maximum: 255
ecs_name	No	String	Backend server name. This parameter is required if the backend instance type is ecs. The value can contain 1 to 64 characters, including letters, digits, hyphens (-), underscores (_), and periods (.). Maximum: 64

Table 3-946 VpcHealthConfig

Parameter	Mandatory	Type	Description
protocol	Yes	String	Protocol for performing health checks on backend servers in the VPC channel. <ul style="list-style-type: none"> • TCP • HTTP • HTTPS Enumeration values: <ul style="list-style-type: none"> • TCP • HTTP • HTTPS

Parameter	Mandatory	Type	Description
path	No	String	Destination path for health checks. This parameter is required if protocol is set to http or https.
method	No	String	Request method for health checks. Default: GET Enumeration values: <ul style="list-style-type: none"> • GET • HEAD
port	No	Integer	Destination port for health checks. If this parameter is not specified or set to 0, the host port of the VPC channel is used. If this parameter is set to a non-zero value, the corresponding port is used for health checks. Minimum: 0 Maximum: 65535
threshold_normal	Yes	Integer	Healthy threshold. It refers to the number of consecutive successful checks required for a backend server to be considered healthy. Minimum: 1 Maximum: 10
threshold_abnormal	Yes	Integer	Unhealthy threshold, which refers to the number of consecutive failed checks required for a backend server to be considered unhealthy. Minimum: 1 Maximum: 10
time_interval	Yes	Integer	Interval between consecutive checks. Unit: s. The value must be greater than the value of timeout. Minimum: 1 Maximum: 300

Parameter	Mandatory	Type	Description
http_code	No	String	Response codes for determining a successful HTTP response. The value can be any integer within 100–599 in one of the following formats: <ul style="list-style-type: none"> • Multiple values, for example, 200,201,202 • Range, for example, 200-299 • Multiple values and ranges, for example, 201,202,210-299. This parameter is required if protocol is set to http.
enable_client_ssl	No	Boolean	Indicates whether to enable two-way authentication. If this function is enabled, the certificate specified in the backend_client_certificate configuration item of the gateway is used. Default: false
status	No	Integer	Health check result. <ul style="list-style-type: none"> • 1: available • 2: unavailable Enumeration values: <ul style="list-style-type: none"> • 1 • 2
timeout	Yes	Integer	Timeout for determining whether a health check fails. Unit: s. The value must be less than the value of time_interval. Minimum: 1 Maximum: 30

Table 3-947 MicroServiceCreate

Parameter	Mandatory	Type	Description
service_type	No	String	Microservice type. Options: <ul style="list-style-type: none"> • CSE: CSE microservice registration center • CCE: CCE workload • CCE_SERVICE: CCE Service Enumeration values: <ul style="list-style-type: none"> • CSE • CCE • CCE_SERVICE
cse_info	No	MicroServiceInfoCSEBase object	CSE microservice details. This parameter is required if service_type is set to CSE.
cce_info	No	MicroServiceInfoCCEBase object	CCE workload details. This parameter is required if service_type is set to CCE. Either app_name or any of label_key and label_value must be set. If only app_name is set, label_key='app' and label_value=app_name.
cce_service_info	No	MicroServiceInfoCCEServiceBase object	CCE Service details.

Table 3-948 MicroServiceInfoCSEBase

Parameter	Mandatory	Type	Description
engine_id	Yes	String	Microservice engine ID. Maximum: 64
service_id	Yes	String	Microservice ID. Maximum: 64

Table 3-949 MicroServiceInfoCCEBase

Parameter	Mandatory	Type	Description
cluster_id	Yes	String	CCE cluster ID. Maximum: 64

Parameter	Mandatory	Type	Description
namespace	Yes	String	Namespace. Maximum: 64
workload_type	Yes	String	Workload type. <ul style="list-style-type: none"> • deployment • statefulset • daemonset Enumeration values: <ul style="list-style-type: none"> • deployment • statefulset • daemonset
app_name	No	String	App name. Start with a letter, and include only letters, digits, periods (.), hyphens (-), and underscores (_). (1 to 64 characters) Minimum: 1 Maximum: 64
label_key	No	String	Service label key. Start with a letter or digit, and use only letters, digits, and these special characters: -_/:(). (1 to 64 characters) Minimum: 1 Maximum: 64
label_value	No	String	Service label value. Start with a letter, and include only letters, digits, periods (.), hyphens (-), and underscores (_). (1 to 64 characters) Minimum: 1 Maximum: 64

Table 3-950 MicroServiceInfoCCEServiceBase

Parameter	Mandatory	Type	Description
cluster_id	Yes	String	CCE cluster ID. Maximum: 64

Parameter	Mandatory	Type	Description
namespace	Yes	String	Namespace. 1 to 63 characters. Use lowercase letters, digits, and hyphens (-). Start with a letter and end with a letter or digit. Minimum: 1 Maximum: 63
service_name	Yes	String	Service name. Start with a letter, and use only letters, digits, periods (.), hyphens (-), and underscores (_). (1 to 64 characters) Minimum: 1 Maximum: 64

Response Parameters

Status code: 200

Table 3-951 Response body parameters

Parameter	Type	Description
name	String	VPC channel name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, hyphens (-), underscores (_), and periods (.) are allowed.
port	Integer	Host port of the VPC channel. Range: 1–65535.
balance_strategy	Integer	Distribution algorithm. <ul style="list-style-type: none"> • 1: Weighted round robin (WRR). • 2: Weighted least connections (WLC). • 3: Source hashing. • 4: URI hashing. Default: 1 Enumeration values: <ul style="list-style-type: none"> • 1 • 2 • 3 • 4

Parameter	Type	Description
member_type	String	Member type of the VPC channel. <ul style="list-style-type: none"> ip ecs Default: ecs Enumeration values: <ul style="list-style-type: none"> ip ecs
type	Integer	VPC channel type. The default type is server. <ul style="list-style-type: none"> 2: Server type. 3: Microservice type. Default: 2 Enumeration values: <ul style="list-style-type: none"> 2 3
dict_code	String	Dictionary code of the VPC channel. The value can contain letters, digits, hyphens (-), underscores (_), and periods (.). This parameter is currently not supported. Minimum: 3 Maximum: 64
create_time	String	Time when the VPC channel is created.
id	String	VPC channel ID.
status	Integer	VPC channel status. <ul style="list-style-type: none"> 1: normal 2: abnormal Enumeration values: <ul style="list-style-type: none"> 1 2
member_groups	Array of MemberGroupInfo objects	Backend server groups.
microservice_info	MicroServiceInfo object	Microservice information.

Table 3-952 MemberGroupInfo

Parameter	Type	Description
member_group_name	String	Name of the VPC channel's backend server group. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, underscores (_), hyphens (-), and periods (.) are allowed.
member_group_remark	String	Description of the backend server group. Maximum: 255
member_group_weight	Integer	Weight of the backend server group. If the server group contains servers and a weight has been set for it, the weight is automatically used to assign weights to servers in this group. Minimum: 0 Maximum: 100
dict_code	String	Dictionary code of the backend server group. The value can contain letters, digits, hyphens (-), underscores (_), and periods (.). Currently, this parameter is not supported. Minimum: 3 Maximum: 64
microservice_version	String	Version of the backend server group. This parameter is supported only when the VPC channel type is microservice. Maximum: 64
microservice_port	Integer	Port of the backend server group. This parameter is supported only when the VPC channel type is microservice. If the port number is 0, all addresses in the backend server group use the original load balancing port to inherit logic. Minimum: 0 Maximum: 65535
microservice_labels	Array of MicroserviceLabel objects	Tags of the backend server group. This parameter is supported only when the VPC channel type is microservice.
member_group_id	String	ID of the backend server group of the VPC channel.
create_time	String	Time when the backend server group is created.

Parameter	Type	Description
update_time	String	Time when the backend server group is updated.

Table 3-953 MicroserviceLabel

Parameter	Type	Description
label_name	String	Tag name. Start and end with a letter or digit. Use only letters, digits, hyphens (-), underscores (_), and periods (.). (Max. 63 characters.) Minimum: 1 Maximum: 63
label_value	String	Tag value. Start and end with a letter or digit. Use only letters, digits, hyphens (-), underscores (_), and periods (.). (Max. 63 characters.) Minimum: 1 Maximum: 63

Table 3-954 MicroServiceInfo

Parameter	Type	Description
id	String	Microservice ID.
instance_id	String	Gateway ID.
service_type	String	Microservice type. Options: <ul style="list-style-type: none"> • CSE: CSE microservice registration center • CCE: CCE workload • CCE_SERVICE: CCE Service Enumeration values: <ul style="list-style-type: none"> • CSE • CCE • CCE_SERVICE
cse_info	MicroServiceInfoCSE object	CSE microservice details.
cce_info	MicroServiceInfoCCE object	CCE microservice workload details.

Parameter	Type	Description
cce_service_info	MicroServiceInfoCCEService object	CCE microservice Service details.
update_time	String	Microservice update time.
create_time	String	Microservice creation time.

Table 3-955 MicroServiceInfoCSE

Parameter	Type	Description
engine_id	String	Microservice engine ID. Maximum: 64
service_id	String	Microservice ID. Maximum: 64
engine_name	String	Microservice engine name.
service_name	String	Microservice name.
register_address	String	Registration center address.
cse_app_id	String	App to which the microservice belongs.
version	String	Microservice version, which has been discarded and is reflected in the version of the backend server group. Maximum: 64

Table 3-956 MicroServiceInfoCCE

Parameter	Type	Description
cluster_id	String	CCE cluster ID. Maximum: 64
namespace	String	Namespace. Maximum: 64

Parameter	Type	Description
workload_type	String	Workload type. <ul style="list-style-type: none"> • deployment • statefulset • daemonset Enumeration values: <ul style="list-style-type: none"> • deployment • statefulset • daemonset
app_name	String	App name. Start with a letter, and include only letters, digits, periods (.), hyphens (-), and underscores (_). (1 to 64 characters) Minimum: 1 Maximum: 64
label_key	String	Service label key. Start with a letter or digit, and use only letters, digits, and these special characters: -_/:(). (1 to 64 characters) Minimum: 1 Maximum: 64
label_value	String	Service label value. Start with a letter, and include only letters, digits, periods (.), hyphens (-), and underscores (_). (1 to 64 characters) Minimum: 1 Maximum: 64
cluster_name	String	CCE cluster name.

Table 3-957 MicroServiceInfoCCEService

Parameter	Type	Description
cluster_id	String	CCE cluster ID. Maximum: 64
namespace	String	Namespace. 1 to 63 characters. Use lowercase letters, digits, and hyphens (-). Start with a letter and end with a letter or digit. Minimum: 1 Maximum: 63

Parameter	Type	Description
service_name	String	Service name. Start with a letter, and use only letters, digits, periods (.), hyphens (-), and underscores (_). (1 to 64 characters) Minimum: 1 Maximum: 64
cluster_name	String	CCE cluster name.

Status code: 400

Table 3-958 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-959 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-960 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-961 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-962 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

- Updating a VPC channel of the server type

```
{
  "balance_strategy" : 2,
  "member_type" : "ip",
  "name" : "VPC_demo",
  "port" : 22,
  "type" : 2,
  "vpc_health_config" : {
    "http_code" : "200",
    "path" : "/vpc/demo",
    "port" : 22,
    "protocol" : "http",
    "threshold_abnormal" : 5,
    "threshold_normal" : 2,
    "time_interval" : 10,
    "timeout" : 5,
    "enable_client_ssl" : false
  },
  "member_groups" : [ {
    "member_group_name" : "test",
    "member_group_weight" : 1,
    "member_group_remark" : "remark"
  }, {
    "member_group_name" : "default",
    "member_group_weight" : 2,
    "member_group_remark" : "remark"
  } ],
  "members" : [ {
    "host" : "192.168.0.5",
    "weight" : 1,
    "member_group_name" : "test"
  }, {
    "host" : "192.168.1.124",
    "weight" : 2,
    "member_group_name" : "default"
  } ]
}
```

- Updating a VPC channel of the microservice type

```
{
  "balance_strategy" : 1,
```

```
"member_type": "ip",
"name": "VPC_demo",
"port": 22,
"type": 3,
"vpc_health_config": {
  "http_code": "200",
  "path": "/vpc/demo",
  "port": 22,
  "protocol": "http",
  "threshold_abnormal": 5,
  "threshold_normal": 2,
  "time_interval": 10,
  "timeout": 5,
  "enable_client_ssl": false
},
"member_groups": [ {
  "member_group_name": "test",
  "member_group_weight": 1,
  "member_group_remark": "remark",
  "microservice_version": "v1",
  "microservice_port": 80
}, {
  "member_group_name": "default",
  "member_group_weight": 2,
  "member_group_remark": "remark",
  "microservice_version": "v2",
  "microservice_port": 80,
  "microservice_labels": [ {
    "label_name": "cluster_id",
    "label_value": "c429700c-5dc4-482a-9c0e-99f6c0635113"
  } ]
} ],
"members": [ {
  "host": "192.168.0.5",
  "weight": 1,
  "member_group_name": "test"
}, {
  "host": "192.168.1.124",
  "weight": 2,
  "member_group_name": "default"
} ],
"microservice_info": {
  "service_type": "CCE",
  "cce_info": {
    "cluster_id": "ab1485b4f91b45abbc560be591f7309",
    "namespace": "default",
    "workload_type": "deployment",
    "app_name": "testapp"
  }
}
}
```

Example Responses

Status code: 200

OK

- Example 1

```
{
  "name": "VPC_demo",
  "port": 22,
  "balance_strategy": 2,
  "member_type": "ip",
  "dict_code": "",
  "create_time": "2020-07-23T07:11:57Z",
  "id": "18174f5f4f1a4dc29f33aeadd9788e5f",
  "status": 1,
}
```



```

"member_groups" : [ {
  "member_group_id" : "c1ce135c705c4066853a0460b318fe16",
  "member_group_name" : "test",
  "member_group_weight" : 1,
  "member_group_remark" : "remark",
  "create_time" : "2020-07-23T07:11:57.244829604Z",
  "update_time" : "2020-07-23T07:11:57.244829604Z"
}, {
  "member_group_id" : "c1ce135c705c4066853a0460b318fe17",
  "member_group_name" : "default",
  "member_group_weight" : 2,
  "member_group_remark" : "remark",
  "create_time" : "2020-07-23T07:11:57.244829604Z",
  "update_time" : "2020-07-23T07:11:57.244829604Z"
}],
"type" : 2,
"microservice_info" : {
  "id" : "",
  "instance_id" : "",
  "service_type" : "",
  "cse_info" : {
    "cse_app_id" : "",
    "engine_id" : "",
    "engine_name" : "",
    "register_address" : "",
    "service_id" : "",
    "service_name" : ""
  },
  "cce_info" : {
    "cluster_id" : "",
    "cluster_name" : "",
    "namespace" : "",
    "workload_type" : "",
    "app_name" : ""
  },
  "create_time" : "",
  "update_time" : ""
}
}

```

- Example 2

```

{
  "name" : "VPC_demo",
  "id" : "105c6902457144a4820dff8b1ad63331",
  "balance_strategy" : 1,
  "dict_code" : "",
  "create_time" : "2020-07-23T07:11:57.244829604Z",
  "member_type" : "ip",
  "port" : 22,
  "status" : 1,
  "member_groups" : [ {
    "member_group_id" : "c1ce135c705c4066853a0460b318fe16",
    "member_group_name" : "test",
    "member_group_weight" : 1,
    "member_group_remark" : "remark",
    "create_time" : "2020-07-23T07:11:57.244829604Z",
    "update_time" : "2020-07-23T07:11:57.244829604Z",
    "microservice_version" : "v1",
    "microservice_port" : 80
  }, {
    "member_group_id" : "c1ce135c705c4066853a0460b318fe17",
    "member_group_name" : "default",
    "member_group_weight" : 2,
    "member_group_remark" : "remark",
    "create_time" : "2020-07-23T07:11:57.244829604Z",
    "update_time" : "2020-07-23T07:11:57.244829604Z",
    "microservice_version" : "v2",
    "microservice_port" : 80,
    "microservice_labels" : [ {
      "label_name" : "cluster_id",

```

```

        "label_value" : "c429700c-5dc4-482a-9c0e-99f6c0635113"
      }
    ]
  },
  "type" : 3,
  "microservice_info" : {
    "id" : "9483afa235be45158a70c19ab817ac65",
    "instance_id" : "eddc4d25480b4cd6b512f270a1b8b341",
    "service_type" : "CCE",
    "cse_info" : {
      "cse_app_id" : "",
      "engine_id" : "",
      "engine_name" : "",
      "register_address" : "",
      "service_id" : "",
      "service_name" : ""
    },
    "cce_info" : {
      "cluster_id" : "ab1485b4f91b45abbc560be591f7309",
      "cluster_name" : "cce-test",
      "namespace" : "default",
      "workload_type" : "deployment",
      "app_name" : "testapp"
    },
    "create_time" : "2020-07-23T07:11:57.244829604Z",
    "update_time" : "2020-07-23T07:11:57.244829604Z"
  }
}

```

Status code: 400

Bad Request

```

{
  "error_code" : "APIG.2001",
  "error_msg" : "The request parameters must be specified, parameter name:members"
}

```

Status code: 401

Unauthorized

```

{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}

```

Status code: 403

Forbidden

```

{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}

```

Status code: 404

Not Found

```

{
  "error_code" : "APIG.3023",
  "error_msg" : "The VPC channel does not exist,id:56a7d7358e1b42459c9d730d65b14e59"
}

```

Status code: 500

Internal Server Error

```

{
  "error_code" : "APIG.9999",

```

```
"error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.18.3 Deleting a VPC Channel

Function

This API is used to delete a VPC channel.

Calling Method

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

URI

DELETE /v2/{project_id}/apigw/instances/{instance_id}/vpc-channels/{vpc_channel_id}

Table 3-963 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Parameter	Mandatory	Type	Description
vpc_channel_id	Yes	String	VPC channel ID.

Request Parameters

Table 3-964 Request header parameters

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

Response Parameters

Status code: 400

Table 3-965 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-966 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-967 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-968 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-969 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3023",
  "error_msg" : "The VPC channel does not exist,id:56a7d7358e1b42459c9d730d65b14e59"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
204	No Content
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.18.4 Querying VPC Channel Details

Function

This API is used to query the details of a VPC channel.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/vpc-channels/{vpc_channel_id}

Table 3-970 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
vpc_channel_id	Yes	String	VPC channel ID.

Request Parameters

Table 3-971 Request header parameters

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

Response Parameters

Status code: 200

Table 3-972 Response body parameters

Parameter	Type	Description
name	String	VPC channel name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, hyphens (-), underscores (_), and periods (.) are allowed.
port	Integer	Host port of the VPC channel. Range: 1–65535.

Parameter	Type	Description
balance_strategy	Integer	<p>Distribution algorithm.</p> <ul style="list-style-type: none"> • 1: Weighted round robin (WRR). • 2: Weighted least connections (WLC). • 3: Source hashing. • 4: URI hashing. <p>Default: 1</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • 1 • 2 • 3 • 4
member_type	String	<p>Member type of the VPC channel.</p> <ul style="list-style-type: none"> • ip • ecs <p>Default: ecs</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • ip • ecs
type	Integer	<p>VPC channel type. The default type is server.</p> <ul style="list-style-type: none"> • 2: Server type. • 3: Microservice type. <p>Default: 2</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • 2 • 3
dict_code	String	<p>Dictionary code of the VPC channel.</p> <p>The value can contain letters, digits, hyphens (-), underscores (_), and periods (.).</p> <p>This parameter is currently not supported.</p> <p>Minimum: 3</p> <p>Maximum: 64</p>
create_time	String	Time when the VPC channel is created.
id	String	VPC channel ID.

Parameter	Type	Description
status	Integer	VPC channel status. <ul style="list-style-type: none"> • 1: normal • 2: abnormal Enumeration values: <ul style="list-style-type: none"> • 1 • 2
member_groups	Array of MemberGroupInfo objects	Backend server groups.
microservice_info	MicroServiceInfo object	Microservice information.
members	Array of VpcMemberInfo objects	Backend instances.
vpc_health_config	VpcHealthConfigInfo object	Health check details.

Table 3-973 MemberGroupInfo

Parameter	Type	Description
member_group_name	String	Name of the VPC channel's backend server group. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, underscores (_), hyphens (-), and periods (.) are allowed.
member_group_remark	String	Description of the backend server group. Maximum: 255
member_group_weight	Integer	Weight of the backend server group. If the server group contains servers and a weight has been set for it, the weight is automatically used to assign weights to servers in this group. Minimum: 0 Maximum: 100

Parameter	Type	Description
dict_code	String	Dictionary code of the backend server group. The value can contain letters, digits, hyphens (-), underscores (_), and periods (.). Currently, this parameter is not supported. Minimum: 3 Maximum: 64
microservice_version	String	Version of the backend server group. This parameter is supported only when the VPC channel type is microservice. Maximum: 64
microservice_port	Integer	Port of the backend server group. This parameter is supported only when the VPC channel type is microservice. If the port number is 0, all addresses in the backend server group use the original load balancing port to inherit logic. Minimum: 0 Maximum: 65535
microservice_labels	Array of MicroserviceLabel objects	Tags of the backend server group. This parameter is supported only when the VPC channel type is microservice.
member_group_id	String	ID of the backend server group of the VPC channel.
create_time	String	Time when the backend server group is created.
update_time	String	Time when the backend server group is updated.

Table 3-974 MicroserviceLabel

Parameter	Type	Description
label_name	String	Tag name. Start and end with a letter or digit. Use only letters, digits, hyphens (-), underscores (_), and periods (.). (Max. 63 characters.) Minimum: 1 Maximum: 63

Parameter	Type	Description
label_value	String	Tag value. Start and end with a letter or digit. Use only letters, digits, hyphens (-), underscores (_), and periods (.). (Max. 63 characters.) Minimum: 1 Maximum: 63

Table 3-975 MicroServiceInfo

Parameter	Type	Description
id	String	Microservice ID.
instance_id	String	Gateway ID.
service_type	String	Microservice type. Options: <ul style="list-style-type: none"> • CSE: CSE microservice registration center • CCE: CCE workload • CCE_SERVICE: CCE Service Enumeration values: <ul style="list-style-type: none"> • CSE • CCE • CCE_SERVICE
cse_info	MicroServiceInfoCSE object	CSE microservice details.
cce_info	MicroServiceInfoCCE object	CCE microservice workload details.
cce_service_info	MicroServiceInfoCCEService object	CCE microservice Service details.
update_time	String	Microservice update time.
create_time	String	Microservice creation time.

Table 3-976 MicroServiceInfoCSE

Parameter	Type	Description
engine_id	String	Microservice engine ID. Maximum: 64

Parameter	Type	Description
service_id	String	Microservice ID. Maximum: 64
engine_name	String	Microservice engine name.
service_name	String	Microservice name.
register_address	String	Registration center address.
cse_app_id	String	App to which the microservice belongs.
version	String	Microservice version, which has been discarded and is reflected in the version of the backend server group. Maximum: 64

Table 3-977 MicroServiceInfoCCE

Parameter	Type	Description
cluster_id	String	CCE cluster ID. Maximum: 64
namespace	String	Namespace. Maximum: 64
workload_type	String	Workload type. <ul style="list-style-type: none"> • deployment • statefulset • daemonset Enumeration values: <ul style="list-style-type: none"> • deployment • statefulset • daemonset
app_name	String	App name. Start with a letter, and include only letters, digits, periods (.), hyphens (-), and underscores (_). (1 to 64 characters) Minimum: 1 Maximum: 64
label_key	String	Service label key. Start with a letter or digit, and use only letters, digits, and these special characters: -_/:(). (1 to 64 characters) Minimum: 1 Maximum: 64

Parameter	Type	Description
label_value	String	Service label value. Start with a letter, and include only letters, digits, periods (.), hyphens (-), and underscores (_). (1 to 64 characters) Minimum: 1 Maximum: 64
cluster_name	String	CCE cluster name.

Table 3-978 MicroServiceInfoCCEService

Parameter	Type	Description
cluster_id	String	CCE cluster ID. Maximum: 64
namespace	String	Namespace. 1 to 63 characters. Use lowercase letters, digits, and hyphens (-). Start with a letter and end with a letter or digit. Minimum: 1 Maximum: 63
service_name	String	Service name. Start with a letter, and use only letters, digits, periods (.), hyphens (-), and underscores (_). (1 to 64 characters) Minimum: 1 Maximum: 64
cluster_name	String	CCE cluster name.

Table 3-979 VpcMemberInfo

Parameter	Type	Description
host	String	Backend server address. This parameter is required when the member type is IP address. Maximum: 64
weight	Integer	Weight. The higher the weight is, the more requests a backend service will receive. Minimum: 0 Maximum: 10000

Parameter	Type	Description
is_backup	Boolean	Indicates whether the backend service is a standby node. After you enable this function, the backend service serves as a standby node. It works only when all non-standby nodes are faulty. This function is supported only when your gateway has been upgraded to the corresponding version. If your gateway does not support this function, contact technical support. Default: false
member_group_name	String	Backend server group name. The server group facilitates backend service address modification.
status	Integer	Backend server status. <ul style="list-style-type: none"> • 1: available • 2: unavailable Enumeration values: <ul style="list-style-type: none"> • 1 • 2
port	Integer	Backend server port. Minimum: 0 Maximum: 65535
ecs_id	String	Backend server ID. This parameter is required if the backend instance type is ecs. The value can contain 1 to 64 characters, including letters, digits, hyphens (-), and underscores (_). Maximum: 255
ecs_name	String	Backend server name. This parameter is required if the backend instance type is ecs. The value can contain 1 to 64 characters, including letters, digits, hyphens (-), underscores (_), and periods (.). Maximum: 64
id	String	Backend instance ID.
vpc_channel_id	String	VPC channel ID.
create_time	String	Time when the backend server is added to the VPC channel.

Parameter	Type	Description
member_group_id	String	Backend server group ID.

Table 3-980 VpcHealthConfigInfo

Parameter	Type	Description
protocol	String	Protocol for performing health checks on backend servers in the VPC channel. <ul style="list-style-type: none"> • TCP • HTTP • HTTPS Enumeration values: <ul style="list-style-type: none"> • TCP • HTTP • HTTPS
path	String	Destination path for health checks. This parameter is required if protocol is set to http or https.
method	String	Request method for health checks. Default: GET Enumeration values: <ul style="list-style-type: none"> • GET • HEAD
port	Integer	Destination port for health checks. If this parameter is not specified or set to 0, the host port of the VPC channel is used. If this parameter is set to a non-zero value, the corresponding port is used for health checks. Minimum: 0 Maximum: 65535
threshold_normal	Integer	Healthy threshold. It refers to the number of consecutive successful checks required for a backend server to be considered healthy. Minimum: 1 Maximum: 10

Parameter	Type	Description
threshold_abnormal	Integer	Unhealthy threshold, which refers to the number of consecutive failed checks required for a backend server to be considered unhealthy. Minimum: 1 Maximum: 10
time_interval	Integer	Interval between consecutive checks. Unit: s. The value must be greater than the value of timeout. Minimum: 1 Maximum: 300
http_code	String	Response codes for determining a successful HTTP response. The value can be any integer within 100–599 in one of the following formats: <ul style="list-style-type: none"> • Multiple values, for example, 200,201,202 • Range, for example, 200-299 • Multiple values and ranges, for example, 201,202,210-299. This parameter is required if protocol is set to http.
enable_client_ssl	Boolean	Indicates whether to enable two-way authentication. If this function is enabled, the certificate specified in the backend_client_certificate configuration item of the gateway is used. Default: false
status	Integer	Health check result. <ul style="list-style-type: none"> • 1: available • 2: unavailable Enumeration values: <ul style="list-style-type: none"> • 1 • 2
timeout	Integer	Timeout for determining whether a health check fails. Unit: s. The value must be less than the value of time_interval. Minimum: 1 Maximum: 30
vpc_channel_id	String	VPC channel ID.
id	String	Health check ID.

Parameter	Type	Description
create_time	String	Creation time.

Status code: 400

Table 3-981 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-982 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-983 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-984 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-985 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

- Example 1

```
{
  "name": "VPC_demo",
  "port": 22,
  "balance_strategy": 1,
  "member_type": "ip",
  "dict_code": "",
  "create_time": "2020-07-23T07:11:57.244829604Z",
  "id": "56a7d7358e1b42459c9d730d65b14e59",
  "status": 1,
  "member_groups": [ ],
  "type": 2,
  "members": [ {
    "host": "192.168.0.5",
    "weight": 1,
    "is_backup": false,
    "member_group_name": "",
    "status": 1,
    "port": 22,
    "ecs_id": "192.168.0.5",
    "ecs_name": "192.168.0.5",
    "id": "be63c6260a1043888187f84af39c9f0e",
    "vpc_channel_id": "56a7d7358e1b42459c9d730d65b14e59",
    "create_time": "2020-07-23T07:11:57Z",
    "member_group_id": ""
  }, {
    "host": "192.168.1.124",
    "weight": 2,
    "is_backup": false,
    "member_group_name": "",
    "status": 1,
    "port": 22,
    "ecs_id": "192.168.1.124",
    "ecs_name": "192.168.1.124",
    "id": "a57b13f1b89b417ca8acd76909e6df67",
    "vpc_channel_id": "56a7d7358e1b42459c9d730d65b14e59",
    "create_time": "2020-07-23T07:11:57Z",
    "member_group_id": ""
  } ],
  "vpc_health_config": {
    "protocol": "http",
    "path": "/vpc/demo",
    "method": "GET",
    "port": 22,
    "threshold_normal": 2,
```

```
"threshold_abnormal" : 5,
"time_interval" : 10,
"http_code" : "200",
"enable_client_ssl" : false,
"status" : 1,
"timeout" : 5,
"vpc_channel_id" : "56a7d7358e1b42459c9d730d65b14e59",
"id" : "3b3d02026c5f402d85e8645ea95b0816",
"create_time" : "2020-07-23T07:11:57Z"
},
"microservice_info" : {
  "id" : "",
  "instance_id" : "",
  "service_type" : "",
  "cse_info" : {
    "cse_app_id" : "",
    "engine_id" : "",
    "engine_name" : "",
    "register_address" : "",
    "service_id" : "",
    "service_name" : ""
  },
  "cce_info" : {
    "cluster_id" : "",
    "cluster_name" : "",
    "namespace" : "",
    "workload_type" : "",
    "app_name" : ""
  },
  "create_time" : "",
  "update_time" : ""
}
}
```

- Example 2

```
{
  "name" : "VPC_demo",
  "id" : "105c6902457144a4820dff8b1ad63331",
  "balance_strategy" : 1,
  "dict_code" : "",
  "create_time" : "2020-07-23T07:11:57.244829604Z",
  "member_type" : "ip",
  "port" : 22,
  "status" : 1,
  "member_groups" : [ {
    "member_group_id" : "c1ce135c705c4066853a0460b318fe16",
    "member_group_name" : "test",
    "member_group_weight" : 1,
    "member_group_remark" : "remark",
    "create_time" : "2020-07-23T07:11:57.244829604Z",
    "update_time" : "2020-07-23T07:11:57.244829604Z",
    "microservice_version" : "v1",
    "microservice_port" : 80
  }, {
    "member_group_id" : "c1ce135c705c4066853a0460b318fe17",
    "member_group_name" : "default",
    "member_group_weight" : 2,
    "member_group_remark" : "remark",
    "create_time" : "2020-07-23T07:11:57.244829604Z",
    "update_time" : "2020-07-23T07:11:57.244829604Z",
    "microservice_version" : "v2",
    "microservice_port" : 80
  } ],
  "type" : 3,
  "vpc_health_config" : {
    "protocol" : "http",
    "path" : "/vpc/demo",
    "method" : "GET",
    "port" : 22,
    "threshold_normal" : 2,
```

```
"threshold_abnormal" : 5,
"time_interval" : 10,
"http_code" : "200",
"enable_client_ssl" : false,
"status" : 1,
"timeout" : 5,
"vpc_channel_id" : "56a7d7358e1b42459c9d730d65b14e59",
"id" : "3b3d02026c5f402d85e8645ea95b0816",
"create_time" : "2020-07-23T07:11:57Z"
},
"microservice_info" : {
  "id" : "9483afa235be45158a70c19ab817ac65",
  "instance_id" : "eddc4d25480b4cd6b512f270a1b8b341",
  "service_type" : "CCE",
  "cse_info" : {
    "cse_app_id" : "",
    "engine_id" : "",
    "engine_name" : "",
    "register_address" : "",
    "service_id" : "",
    "service_name" : ""
  },
  "cce_info" : {
    "cluster_id" : "ab1485b4f91b45abbc560be591f7309",
    "cluster_name" : "cce-test",
    "namespace" : "default",
    "workload_type" : "deployment",
    "app_name" : "testapp"
  },
  "create_time" : "2020-07-23T07:11:57.244829604Z",
  "update_time" : "2020-07-23T07:11:57.244829604Z"
}
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3023",
  "error_msg" : "The VPC channel does not exist,id:56a7d7358e1b42459c9d730d65b14e59"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.18.5 Querying VPC Channels

Function

This API is used to query the VPC channels under a gateway.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/vpc-channels

Table 3-986 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-987 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20
id	No	String	VPC channel ID.
name	No	String	VPC channel name.
dict_code	No	String	Dictionary code of the VPC channel. The value can contain letters, digits, hyphens (-), underscores (_), and periods (.). This parameter is currently not supported. Minimum: 3 Maximum: 64

Parameter	Mandatory	Type	Description
precise_search	No	String	Parameter name for exact matching. Separate multiple parameter names with commas (.). Currently, name and member_group_name are supported.
member_host	No	String	Backend service address. By default, exact match is used. Fuzzy match is not supported.
member_port	No	Integer	Backend server port. Minimum: 0 Maximum: 65535
member_group_name	No	String	Backend server group name.
member_group_id	No	String	Backend server group ID.

Request Parameters

Table 3-988 Request header parameters

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

Response Parameters

Status code: 200

Table 3-989 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.

Parameter	Type	Description
vpc_channels	Array of VpcChannelInfo objects	VPC channel list.

Table 3-990 VpcChannelInfo

Parameter	Type	Description
name	String	VPC channel name. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, hyphens (-), underscores (_), and periods (.) are allowed.
port	Integer	Host port of the VPC channel. Range: 1–65535.
balance_strategy	Integer	Distribution algorithm. <ul style="list-style-type: none"> • 1: Weighted round robin (WRR). • 2: Weighted least connections (WLC). • 3: Source hashing. • 4: URI hashing. Default: 1 Enumeration values: <ul style="list-style-type: none"> • 1 • 2 • 3 • 4
member_type	String	Member type of the VPC channel. <ul style="list-style-type: none"> • ip • ecs Default: ecs Enumeration values: <ul style="list-style-type: none"> • ip • ecs

Parameter	Type	Description
type	Integer	VPC channel type. The default type is server. <ul style="list-style-type: none"> • 2: Server type. • 3: Microservice type. Default: 2 Enumeration values: <ul style="list-style-type: none"> • 2 • 3
dict_code	String	Dictionary code of the VPC channel. The value can contain letters, digits, hyphens (-), underscores (_), and periods (.). This parameter is currently not supported. Minimum: 3 Maximum: 64
create_time	String	Time when the VPC channel is created.
id	String	VPC channel ID.
status	Integer	VPC channel status. <ul style="list-style-type: none"> • 1: normal • 2: abnormal Enumeration values: <ul style="list-style-type: none"> • 1 • 2
member_groups	Array of MemberGroupInfo objects	Backend server groups.
microservice_info	MicroServiceInfo object	Microservice information.

Table 3-991 MemberGroupInfo

Parameter	Type	Description
member_group_name	String	Name of the VPC channel's backend server group. It can contain 3 to 64 characters, starting with a letter. Only letters, digits, underscores (_), hyphens (-), and periods (.) are allowed.
member_group_remark	String	Description of the backend server group. Maximum: 255

Parameter	Type	Description
member_group_weight	Integer	Weight of the backend server group. If the server group contains servers and a weight has been set for it, the weight is automatically used to assign weights to servers in this group. Minimum: 0 Maximum: 100
dict_code	String	Dictionary code of the backend server group. The value can contain letters, digits, hyphens (-), underscores (_), and periods (.). Currently, this parameter is not supported. Minimum: 3 Maximum: 64
microservice_version	String	Version of the backend server group. This parameter is supported only when the VPC channel type is microservice. Maximum: 64
microservice_port	Integer	Port of the backend server group. This parameter is supported only when the VPC channel type is microservice. If the port number is 0, all addresses in the backend server group use the original load balancing port to inherit logic. Minimum: 0 Maximum: 65535
microservice_labels	Array of MicroserviceLabel objects	Tags of the backend server group. This parameter is supported only when the VPC channel type is microservice.
member_group_id	String	ID of the backend server group of the VPC channel.
create_time	String	Time when the backend server group is created.
update_time	String	Time when the backend server group is updated.

Table 3-992 MicroserviceLabel

Parameter	Type	Description
label_name	String	Tag name. Start and end with a letter or digit. Use only letters, digits, hyphens (-), underscores (_), and periods (.). (Max. 63 characters.) Minimum: 1 Maximum: 63
label_value	String	Tag value. Start and end with a letter or digit. Use only letters, digits, hyphens (-), underscores (_), and periods (.). (Max. 63 characters.) Minimum: 1 Maximum: 63

Table 3-993 MicroServiceInfo

Parameter	Type	Description
id	String	Microservice ID.
instance_id	String	Gateway ID.
service_type	String	Microservice type. Options: <ul style="list-style-type: none"> • CSE: CSE microservice registration center • CCE: CCE workload • CCE_SERVICE: CCE Service Enumeration values: <ul style="list-style-type: none"> • CSE • CCE • CCE_SERVICE
cse_info	MicroServiceInfoCSE object	CSE microservice details.
cce_info	MicroServiceInfoCCE object	CCE microservice workload details.
cce_service_info	MicroServiceInfoCCEService object	CCE microservice Service details.
update_time	String	Microservice update time.
create_time	String	Microservice creation time.

Table 3-994 MicroServiceInfoCSE

Parameter	Type	Description
engine_id	String	Microservice engine ID. Maximum: 64
service_id	String	Microservice ID. Maximum: 64
engine_name	String	Microservice engine name.
service_name	String	Microservice name.
register_address	String	Registration center address.
cse_app_id	String	App to which the microservice belongs.
version	String	Microservice version, which has been discarded and is reflected in the version of the backend server group. Maximum: 64

Table 3-995 MicroServiceInfoCCE

Parameter	Type	Description
cluster_id	String	CCE cluster ID. Maximum: 64
namespace	String	Namespace. Maximum: 64
workload_type	String	Workload type. <ul style="list-style-type: none"> • deployment • statefulset • daemonset Enumeration values: <ul style="list-style-type: none"> • deployment • statefulset • daemonset
app_name	String	App name. Start with a letter, and include only letters, digits, periods (.), hyphens (-), and underscores (_). (1 to 64 characters) Minimum: 1 Maximum: 64

Parameter	Type	Description
label_key	String	Service label key. Start with a letter or digit, and use only letters, digits, and these special characters: -_/:(). (1 to 64 characters) Minimum: 1 Maximum: 64
label_value	String	Service label value. Start with a letter, and include only letters, digits, periods (.), hyphens (-), and underscores (_). (1 to 64 characters) Minimum: 1 Maximum: 64
cluster_name	String	CCE cluster name.

Table 3-996 MicroServiceInfoCCEService

Parameter	Type	Description
cluster_id	String	CCE cluster ID. Maximum: 64
namespace	String	Namespace. 1 to 63 characters. Use lowercase letters, digits, and hyphens (-). Start with a letter and end with a letter or digit. Minimum: 1 Maximum: 63
service_name	String	Service name. Start with a letter, and use only letters, digits, periods (.), hyphens (-), and underscores (_). (1 to 64 characters) Minimum: 1 Maximum: 64
cluster_name	String	CCE cluster name.

Status code: 400

Table 3-997 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-998 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-999 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1000 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1001 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total": 2,
  "size": 2,
  "vpc_channels": [ {
    "name": "channel 1",
    "port": 8080,
    "balance_strategy": 1,
    "member_type": "ip",
    "dict_code": "",
    "create_time": "2020-07-23T07:24:33Z",
    "id": "105c6902457144a4820dff8b1ad63331",
    "status": 1,
    "member_groups": [ ],
    "type": 2,
    "microservice_info": {
      "id": "",
      "instance_id": "",
      "service_type": "",
      "cse_info": {
        "cse_app_id": "",
        "engine_id": "",
        "engine_name": "",
        "register_address": "",
        "service_id": "",
        "service_name": ""
      },
      "cce_info": {
        "cluster_id": "",
        "cluster_name": "",
        "namespace": "",
        "workload_type": "",
        "app_name": ""
      },
      "create_time": "",
      "update_time": ""
    }
  }, {
    "name": "channel 2",
    "port": 8088,
    "balance_strategy": 2,
    "member_type": "ip",
    "dict_code": "",
    "create_time": "2020-07-23T07:11:57Z",
    "id": "56a7d7358e1b42459c9d730d65b14e59",
    "status": 1,
    "member_groups": [ ],
    "type": 3,
    "microservice_info": {
      "id": "9483afa235be45158a70c19ab817ac65",
      "instance_id": "eddc4d25480b4cd6b512f270a1b8b341",
      "service_type": "CCE",
      "cse_info": {
        "cse_app_id": "",
        "engine_id": "",
        "engine_name": "",
        "register_address": "",
        "service_id": "",
        "service_name": ""
      },
      "cce_info": {
        "cluster_id": "ab1485b4f91b45abbc560be591f7309",
        "cluster_name": "cce-test",
        "namespace": "default",
        "workload_type": "deployment",
        "app_name": "testapp"
      },
      "create_time": "2020-07-23T07:11:57.244829604Z",
      "update_time": "2020-07-23T07:11:57.244829604Z"
    }
  }
}
```

```
}
}]
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2011",
  "error_msg" : "The request parameters must be specified,parameterName:name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3030",
  "error_msg" : "The instance does not exist;id:eddc4d25480b4cd6b512f270a1b8b341"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found

Status Code	Description
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.18.6 Adding or Updating Backend Instances

Function

This API is used to add backend instances to a VPC channel.

If a backend instance with the specified address already exists, the instance information is updated. If the request body contains multiple backend instance definitions with the same address, the first definition is used.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances/{instance_id}/vpc-channels/{vpc_channel_id}/members

Table 3-1002 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
vpc_channel_id	Yes	String	VPC channel ID.

Request Parameters

Table 3-1003 Request header parameters

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

Table 3-1004 Request body parameters

Parameter	Mandatory	Type	Description
members	Yes	Array of MemberInfo objects	Backend instances.

Table 3-1005 MemberInfo

Parameter	Mandatory	Type	Description
host	No	String	Backend server address. This parameter is required when the member type is IP address. Maximum: 64
weight	No	Integer	Weight. The higher the weight is, the more requests a backend service will receive. Minimum: 0 Maximum: 10000

Parameter	Mandatory	Type	Description
is_backup	No	Boolean	<p>Indicates whether the backend service is a standby node.</p> <p>After you enable this function, the backend service serves as a standby node. It works only when all non-standby nodes are faulty.</p> <p>This function is supported only when your gateway has been upgraded to the corresponding version. If your gateway does not support this function, contact technical support.</p> <p>Default: false</p>
member_group_name	No	String	Backend server group name. The server group facilitates backend service address modification.
status	No	Integer	<p>Backend server status.</p> <ul style="list-style-type: none"> • 1: available • 2: unavailable <p>Enumeration values:</p> <ul style="list-style-type: none"> • 1 • 2
port	No	Integer	<p>Backend server port.</p> <p>Minimum: 0</p> <p>Maximum: 65535</p>
ecs_id	No	String	<p>Backend server ID.</p> <p>This parameter is required if the backend instance type is ecs. The value can contain 1 to 64 characters, including letters, digits, hyphens (-), and underscores (_).</p> <p>Maximum: 255</p>

Parameter	Mandatory	Type	Description
ecs_name	No	String	Backend server name. This parameter is required if the backend instance type is ecs. The value can contain 1 to 64 characters, including letters, digits, hyphens (-), underscores (_), and periods (.). Maximum: 64

Response Parameters

Status code: 201

Table 3-1006 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
members	Array of VpcMemberInfo objects	Cloud server list.

Table 3-1007 VpcMemberInfo

Parameter	Type	Description
host	String	Backend server address. This parameter is required when the member type is IP address. Maximum: 64
weight	Integer	Weight. The higher the weight is, the more requests a backend service will receive. Minimum: 0 Maximum: 10000

Parameter	Type	Description
is_backup	Boolean	Indicates whether the backend service is a standby node. After you enable this function, the backend service serves as a standby node. It works only when all non-standby nodes are faulty. This function is supported only when your gateway has been upgraded to the corresponding version. If your gateway does not support this function, contact technical support. Default: false
member_group_name	String	Backend server group name. The server group facilitates backend service address modification.
status	Integer	Backend server status. <ul style="list-style-type: none"> • 1: available • 2: unavailable Enumeration values: <ul style="list-style-type: none"> • 1 • 2
port	Integer	Backend server port. Minimum: 0 Maximum: 65535
ecs_id	String	Backend server ID. This parameter is required if the backend instance type is ecs. The value can contain 1 to 64 characters, including letters, digits, hyphens (-), and underscores (_). Maximum: 255
ecs_name	String	Backend server name. This parameter is required if the backend instance type is ecs. The value can contain 1 to 64 characters, including letters, digits, hyphens (-), underscores (_), and periods (.). Maximum: 64
id	String	Backend instance ID.
vpc_channel_id	String	VPC channel ID.
create_time	String	Time when the backend server is added to the VPC channel.

Parameter	Type	Description
member_group_id	String	Backend server group ID.

Status code: 400

Table 3-1008 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-1009 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1010 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1011 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500**Table 3-1012** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

- Adding a cloud server IP address to a VPC channel

```
{
  "members" : [ {
    "host" : "192.168.2.25",
    "weight" : 1,
    "member_group_name" : "test"
  } ]
}
```

- Adding a cloud server name to a VPC channel

```
{
  "members" : [ {
    "ecs_id" : "1082720c-3c15-409c-9ae3-4983ddfb6a9d",
    "ecs_name" : "APIGtest02",
    "weight" : 2
  } ]
}
```

Example Responses**Status code: 201**

Created

- Example 1

```
{
  "total" : 1,
  "size" : 1,
  "members" : [ {
    "host" : "192.168.2.25",
    "weight" : 1,
    "is_backup" : false,
    "member_group_name" : "test",
    "status" : 1,
    "port" : 22,
    "ecs_id" : "3082720c-3c15-409c-9ae3-4983ddfb6a9d",
    "ecs_name" : "APIGtest",
    "id" : "683b6807cad54122a6777ad047a6178e",
    "vpc_channel_id" : "105c6902457144a4820dff8b1ad63331",
    "create_time" : "2020-07-23T09:13:24Z",
    "member_group_id" : "cf868f0224084710a1e188b7d3057c52"
  } ]
}
```

- Example 2

```
{
  "total" : 2,
  "size" : 2,
  "members" : [ {
    "host" : "192.168.0.17",
```

```
"weight" : 2,
"is_backup" : false,
"member_group_name" : "test02",
"status" : 1,
"port" : 22,
"ecs_id" : "1082720c-3c15-409c-9ae3-4983ddfb6a9d",
"ecs_name" : "APIGtest02",
"id" : "5c868f0224084710a1e188b7d3057c52",
"vpc_channel_id" : "105c6902457144a4820dff8b1ad63331",
"create_time" : "2020-07-23T09:03:53Z",
"member_group_id" : "df868f0224084710a1e188b7d3057c52"
}, {
"host" : "192.168.0.39",
"weight" : 1,
"is_backup" : false,
"member_group_name" : "test01",
"status" : 1,
"port" : 22,
"ecs_id" : "ebe1104f-1254-4ac6-8ed7-366bec84f36e",
"ecs_name" : "APIGtest01",
"id" : "33ac0e39d005492eb1f4683e66d1a0d1",
"vpc_channel_id" : "105c6902457144a4820dff8b1ad63331",
"create_time" : "2020-07-23T07:24:34Z",
"member_group_id" : "ef868f0224084710a1e188b7d3057c42"
}]
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2004",
  "error_msg" : "The parameter value is outside the allowable range,parameterName:weight. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3023",
  "error_msg" : "The VPC channel does not exist,id:56a7d7358e1b42459c9d730d65b14e59"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
```



```
"error_msg": "System error"
}
```

Status Codes

Status Code	Description
201	Created
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.18.7 Querying Backend Servers of a VPC Channel

Function

This API is used to query the backend instances of a specified VPC channel.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/vpc-channels/{vpc_channel_id}/members

Table 3-1013 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Parameter	Mandatory	Type	Description
vpc_channel_id	Yes	String	VPC channel ID.

Table 3-1014 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20
name	No	String	Cloud server name.
member_group_name	No	String	Backend server group name.
member_group_id	No	String	Backend server group ID.
precise_search	No	String	Parameter name for exact matching. Separate multiple parameter names with commas (,). Currently, name and member_group_name are supported.

Request Parameters

Table 3-1015 Request header parameters

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

Response Parameters

Status code: 200

Table 3-1016 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
members	Array of VpcMemberInfo objects	Cloud server list.

Table 3-1017 VpcMemberInfo

Parameter	Type	Description
host	String	Backend server address. This parameter is required when the member type is IP address. Maximum: 64
weight	Integer	Weight. The higher the weight is, the more requests a backend service will receive. Minimum: 0 Maximum: 10000

Parameter	Type	Description
is_backup	Boolean	Indicates whether the backend service is a standby node. After you enable this function, the backend service serves as a standby node. It works only when all non-standby nodes are faulty. This function is supported only when your gateway has been upgraded to the corresponding version. If your gateway does not support this function, contact technical support. Default: false
member_group_name	String	Backend server group name. The server group facilitates backend service address modification.
status	Integer	Backend server status. <ul style="list-style-type: none"> • 1: available • 2: unavailable Enumeration values: <ul style="list-style-type: none"> • 1 • 2
port	Integer	Backend server port. Minimum: 0 Maximum: 65535
ecs_id	String	Backend server ID. This parameter is required if the backend instance type is ecs. The value can contain 1 to 64 characters, including letters, digits, hyphens (-), and underscores (_). Maximum: 255
ecs_name	String	Backend server name. This parameter is required if the backend instance type is ecs. The value can contain 1 to 64 characters, including letters, digits, hyphens (-), underscores (_), and periods (.). Maximum: 64
id	String	Backend instance ID.
vpc_channel_id	String	VPC channel ID.
create_time	String	Time when the backend server is added to the VPC channel.

Parameter	Type	Description
member_group_id	String	Backend server group ID.

Status code: 400

Table 3-1018 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-1019 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1020 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1021 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1022 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total" : 2,
  "size" : 2,
  "members" : [ {
    "host" : "192.168.0.5",
    "weight" : 1,
    "is_backup" : false,
    "member_group_name" : "",
    "status" : 1,
    "port" : 22,
    "ecs_id" : "192.168.0.5",
    "ecs_name" : "192.168.0.5",
    "id" : "be63c6260a1043888187f84af39c9f0e",
    "vpc_channel_id" : "56a7d7358e1b42459c9d730d65b14e59",
    "create_time" : "2020-07-23T07:11:57Z",
    "member_group_id" : ""
  }, {
    "host" : "192.168.1.124",
    "weight" : 2,
    "is_backup" : false,
    "member_group_name" : "",
    "status" : 1,
    "port" : 22,
    "ecs_id" : "192.168.1.124",
    "ecs_name" : "192.168.1.124",
    "id" : "a57b13f1b89b417ca8acd76909e6df67",
    "vpc_channel_id" : "56a7d7358e1b42459c9d730d65b14e59",
    "create_time" : "2020-07-23T07:11:57Z",
    "member_group_id" : ""
  }
  ]
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:name. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3023",
  "error_msg" : "The VPC channel does not exist,id:56a7d7358e1b42459c9d730d65b14e59"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.18.8 Updating Backend Instances

Function

This API is used to update the backend instances of a specified VPC channel. During the update, the request parameters overwrite the backend instances of the

corresponding cloud server group. If no cloud server group is specified, all cloud server groups are overwritten.

Calling Method

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

URI

PUT /v2/{project_id}/apigw/instances/{instance_id}/vpc-channels/{vpc_channel_id}/members

Table 3-1023 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
vpc_channel_id	Yes	String	VPC channel ID.

Request Parameters

Table 3-1024 Request header parameters

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

Table 3-1025 Request body parameters

Parameter	Mandatory	Type	Description
members	No	Array of MemberInfo objects	Backend instances.

Parameter	Mandatory	Type	Description
member_group_name	No	String	Backend server group to be modified. If this parameter is not specified, all backends defined by members for the VPC channel are modified. If this parameter is specified, only the backend instances in the backend server group defined by members are modified. Input parameters of other backend server groups are ignored. For example, if member_group_name=primary is passed, only backend instances of backend server group 105c6902457144a4820dff8b1ad63331 in members are modified.

Table 3-1026 MemberInfo

Parameter	Mandatory	Type	Description
host	No	String	Backend server address. This parameter is required when the member type is IP address. Maximum: 64
weight	No	Integer	Weight. The higher the weight is, the more requests a backend service will receive. Minimum: 0 Maximum: 10000

Parameter	Mandatory	Type	Description
is_backup	No	Boolean	<p>Indicates whether the backend service is a standby node.</p> <p>After you enable this function, the backend service serves as a standby node. It works only when all non-standby nodes are faulty.</p> <p>This function is supported only when your gateway has been upgraded to the corresponding version. If your gateway does not support this function, contact technical support.</p> <p>Default: false</p>
member_group_name	No	String	Backend server group name. The server group facilitates backend service address modification.
status	No	Integer	<p>Backend server status.</p> <ul style="list-style-type: none"> • 1: available • 2: unavailable <p>Enumeration values:</p> <ul style="list-style-type: none"> • 1 • 2
port	No	Integer	<p>Backend server port.</p> <p>Minimum: 0</p> <p>Maximum: 65535</p>
ecs_id	No	String	<p>Backend server ID.</p> <p>This parameter is required if the backend instance type is ecs. The value can contain 1 to 64 characters, including letters, digits, hyphens (-), and underscores (_).</p> <p>Maximum: 255</p>

Parameter	Mandatory	Type	Description
ecs_name	No	String	Backend server name. This parameter is required if the backend instance type is ecs. The value can contain 1 to 64 characters, including letters, digits, hyphens (-), underscores (_), and periods (.). Maximum: 64

Response Parameters

Status code: 200

Table 3-1027 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
members	Array of VpcMemberInfo objects	Cloud server list.

Table 3-1028 VpcMemberInfo

Parameter	Type	Description
host	String	Backend server address. This parameter is required when the member type is IP address. Maximum: 64
weight	Integer	Weight. The higher the weight is, the more requests a backend service will receive. Minimum: 0 Maximum: 10000

Parameter	Type	Description
is_backup	Boolean	Indicates whether the backend service is a standby node. After you enable this function, the backend service serves as a standby node. It works only when all non-standby nodes are faulty. This function is supported only when your gateway has been upgraded to the corresponding version. If your gateway does not support this function, contact technical support. Default: false
member_group_name	String	Backend server group name. The server group facilitates backend service address modification.
status	Integer	Backend server status. <ul style="list-style-type: none"> • 1: available • 2: unavailable Enumeration values: <ul style="list-style-type: none"> • 1 • 2
port	Integer	Backend server port. Minimum: 0 Maximum: 65535
ecs_id	String	Backend server ID. This parameter is required if the backend instance type is ecs. The value can contain 1 to 64 characters, including letters, digits, hyphens (-), and underscores (_). Maximum: 255
ecs_name	String	Backend server name. This parameter is required if the backend instance type is ecs. The value can contain 1 to 64 characters, including letters, digits, hyphens (-), underscores (_), and periods (.). Maximum: 64
id	String	Backend instance ID.
vpc_channel_id	String	VPC channel ID.
create_time	String	Time when the backend server is added to the VPC channel.

Parameter	Type	Description
member_group_id	String	Backend server group ID.

Status code: 400

Table 3-1029 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-1030 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1031 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1032 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500**Table 3-1033** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

- Updating non-standby backend instances of a VPC channel

```
{
  "member_group_name": "primary",
  "members": [ {
    "host": "192.168.2.25",
    "weight": 1,
    "is_backup": false,
    "member_group_name": "primary"
  } ]
}
```

- Updating all backend instances of a VPC channel

```
{
  "members": [ {
    "ecs_id": "1082720c-3c15-409c-9ae3-4983ddfb6a9d",
    "ecs_name": "APIGtest02",
    "weight": 2
  } ]
}
```

Example Responses**Status code: 200**

OK

- Example 1

```
{
  "total": 1,
  "size": 1,
  "members": [ {
    "host": "192.168.2.25",
    "weight": 1,
    "is_backup": false,
    "member_group_name": "primary",
    "port": 22,
    "status": 1,
    "ecs_id": "192.168.2.25",
    "ecs_name": "192.168.2.25",
    "id": "683b6807cad54122a6777ad047a6178e",
    "vpc_channel_id": "56a7d7358e1b42459c9d730d65b14e59",
    "create_time": "2020-07-23T09:13:24Z",
    "member_group_id": "631b551cddda40478ef720163a9412ed"
  } ]
}
```

- Example 2

```
{
  "total": 1,
  "size": 1,
```

```
"members" : [ {  
  "host" : "192.168.0.17",  
  "weight" : 2,  
  "is_backup" : false,  
  "member_group_name" : "primary",  
  "port" : 22,  
  "status" : 1,  
  "ecs_id" : "1082720c-3c15-409c-9ae3-4983ddfb6a9d",  
  "ecs_name" : "APIGtest02",  
  "id" : "5c868f0224084710a1e188b7d3057c52",  
  "vpc_channel_id" : "105c6902457144a4820dff8b1ad63331",  
  "create_time" : "2020-07-23T09:03:53Z",  
  "member_group_id" : "631b551cddda40478ef720163a9412ed"  
} ]  
}
```

Status code: 400

Bad Request

```
{  
  "error_code" : "APIG.2001",  
  "error_msg" : "The request parameters must be specified, parameter name:members"  
}
```

Status code: 401

Unauthorized

```
{  
  "error_code" : "APIG.1002",  
  "error_msg" : "Incorrect token or token resolution failed"  
}
```

Status code: 403

Forbidden

```
{  
  "error_code" : "APIG.1005",  
  "error_msg" : "No permissions to request this method"  
}
```

Status code: 404

Not Found

```
{  
  "error_code" : "APIG.3023",  
  "error_msg" : "The VPC channel does not exist,id:56a7d7358e1b42459c9d730d65b14e59"  
}
```

Status code: 500

Internal Server Error

```
{  
  "error_code" : "APIG.9999",  
  "error_msg" : "System error"  
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.18.9 Removing a Backend Server

Function

This API is used to delete a backend instance from a specified VPC channel.

Calling Method

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

URI

DELETE /v2/{project_id}/apigw/instances/{instance_id}/vpc-channels/{vpc_channel_id}/members/{member_id}

Table 3-1034 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
vpc_channel_id	Yes	String	VPC channel ID.
member_id	Yes	String	Backend instance ID.

Request Parameters

Table 3-1035 Request header parameters

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

Response Parameters

Status code: 400

Table 3-1036 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-1037 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1038 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1039 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1040 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3024",
  "error_msg" : "The VPC instance does not exist,id:be63c6260a1043888187f84af39c9f0e"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
204	No Content
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error CodesSee [Error Codes](#).

3.19 Monitoring Information Query

3.19.1 Querying API Calls Within a Period

Function

This API is used to query the number of times APIs in an API group are called within a period. The query is based on 1 minute. If the time range is within one hour, the server returns the number of API calls made every minute.

 **NOTE**

For security purposes, clear your operation records, including but not limited to records in the `~/.bash_history` and `/var/log/messages` directories (if any), after running the curl command on the server to query information.

Calling MethodFor details, see [Calling APIs](#).**URI**GET `/v2/{project_id}/apigw/instances/{instance_id}/statistics/api/latest`

Table 3-1041 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-1042 Query Parameters

Parameter	Mandatory	Type	Description
api_id	Yes	String	API ID.
duration	Yes	String	Time range (unit: h or m). For example, 1h refers to the latest 1 hour and 1m refers to the latest 1 minute.

Request Parameters

Table 3-1043 Request header parameters

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

Response Parameters

Status code: 200

Table 3-1044 Response body parameters

Parameter	Type	Description
code	String	Response code.
msg	String	Response message.
start_time	Long	Timestamp (UTC) of the start time.

Parameter	Type	Description
end_time	Long	Timestamp (UTC) of the end time.
list	Array of StatisticsAPI objects	Statistic data.

Table 3-1045 StatisticsAPI

Parameter	Type	Description
max_latency	Integer	Maximum latency. Unit: ms
avg_latency	Float	Average latency. Unit: ms
req_count	Integer	Total number of requests.
req_count2xx	Integer	Total number of 2xx response codes.
req_count4xx	Integer	Total number of 4xx response codes.
req_count5xx	Integer	Total number of 5xx response codes.
req_count_error	Integer	Errors.
max_inner_latency	Integer	Maximum gateway latency. Unit: ms
avg_inner_latency	Float	Average gateway latency. Unit: ms
max_backend_latency	Integer	Maximum backend latency.
avg_backend_latency	Float	Average backend latency.
output_throughput	Long	Downstream throughput (bytes).
input_throughput	Long	Upstream throughput (bytes).
current_minute	Long	Timestamp (UTC) of API access.

Parameter	Type	Description
cycle	String	Statistical period. Enumeration values: <ul style="list-style-type: none"> • MINUTE • HOUR • DAY
api_id	String	API ID.
group_id	String	API group ID.
provider	String	API provider.
req_time	String	Request time.
register_time	String	Recording time.
status	Integer	Status.

Status code: 400

Table 3-1046 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-1047 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1048 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Status code: 404

Table 3-1049 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1050 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "code": "APIG.0000",
  "start_time": 1595573280,
  "end_time": 1595576820,
  "list": [ {
    "api_id": "39bce6d25a3f470e8cf7b2c97174f7d9",
    "avg_backend_latency": 2.71,
    "avg_inner_latency": 1.57,
    "avg_latency": 4.14,
    "current_minute": 1595576640,
    "cycle": "MINUTE",
    "group_id": "d0fc4e40b7d1492cba802f667c7c7226",
    "input_throughput": 1071,
    "max_backend_latency": 6,
    "max_inner_latency": 8,
    "max_latency": 14,
    "output_throughput": 3790,
    "provider": "73d69ae0cfcf460190522d06b60f05ad",
    "register_time": "2020-07-24 15:44:56",
    "req_count": 7,
  }
]
```

```

    "req_count2xx" : 0,
    "req_count4xx" : 6,
    "req_count5xx" : 1,
    "req_count_error" : 7,
    "req_time" : "2020-07-24 15:44:00",
    "status" : 1
  } ]
}

```

Status code: 400

Bad Request

```

{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:api_id. Please refer to the support documentation"
}

```

Status code: 401

Unauthorized

```

{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}

```

Status code: 403

Forbidden

```

{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}

```

Status code: 404

Not Found

```

{
  "error_code" : "APIG.3002",
  "error_msg" : "API 39bce6d25a3f470e8cf7b2c97174f7d9 does not exist"
}

```

Status code: 500

Internal Server Error

```

{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}

```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden

Status Code	Description
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.19.2 Querying Monitoring Data

Function

This API is used to query the monitoring metric data at a specified granularity in a specified period of time.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/metric-data

Table 3-1051 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-1052 Query Parameters

Parameter	Mandatory	Type	Description
dim	Yes	String	<p>Metric dimension.</p> <ul style="list-style-type: none"> inbound_eip: Inbound public network bandwidth, which is supported only by gateways that support load balancing. outbound_eip: Outbound public network bandwidth. <p>Enumeration values:</p> <ul style="list-style-type: none"> inbound_eip outbound_eip
metric_name	Yes	String	<p>Metric name.</p> <ul style="list-style-type: none"> upstream_bandwidth: Outbound bandwidth. downstream_bandwidth: Inbound bandwidth. upstream_bandwidth_usage : Outbound bandwidth usage. downstream_bandwidth_usage: Inbound bandwidth usage. up_stream: Outbound traffic. down_stream: Inbound traffic. <p>Enumeration values:</p> <ul style="list-style-type: none"> upstream_bandwidth downstream_bandwidth upstream_bandwidth_usage downstream_bandwidth_usage up_stream down_stream
from	Yes	String	<p>Start time of the query. The time is a UNIX timestamp and the unit is ms.</p>

Parameter	Mandatory	Type	Description
to	Yes	String	End time of the query. The time is a UNIX timestamp and the unit is ms. The value of parameter from must be earlier than that of parameter to.
period	Yes	Integer	Monitoring data granularity. <ul style="list-style-type: none"> • 1: Real-time data. • 300: 5 minutes. • 1200: 20 minutes. • 3600: 1 hour. • 14400: 4 hours. • 86400: 1 day. Enumeration values: <ul style="list-style-type: none"> • 1 • 300 • 1200 • 3600 • 14400 • 86400
filter	Yes	String	Data rollup mode. <ul style="list-style-type: none"> • average: Average value of the metric data in the rollup period. • max: Maximum value of the metric data in the rollup period. • min: Minimum value of the metric data in the rollup period. • sum: Sum of the metric data in the rollup period. • variance: Variance value of the metric data in the rollup period. Enumeration values: <ul style="list-style-type: none"> • average • max • min • sum • variance

Request Parameters

Table 3-1053 Request header parameters

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

Response Parameters

Status code: 200

Table 3-1054 Response body parameters

Parameter	Type	Description
datapoints	Array of MetricData objects	Metric data.

Table 3-1055 MetricData

Parameter	Type	Description
average	Integer	Average value of metric data within a rollup period. This parameter is supported only when the value of filter in the request is average.
max	Integer	Maximum value of metric data within a rollup period. This parameter is supported only when the value of filter in the request is max.
min	Integer	Minimum value of metric data within a rollup period. This parameter is supported only when the value of filter in the request is min.
sum	Integer	Sum of metric data within a rollup period. This parameter is supported only when the value of filter in the request is sum.
variance	Integer	Variance value of metric data within a rollup period. This parameter is supported only when the value of filter in the request is variance.

Parameter	Type	Description
timestamp	Integer	Time when the metric is collected. It is a UNIX timestamp in milliseconds.
unit	String	Metric unit.

Status code: 400

Table 3-1056 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-1057 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1058 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1059 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500**Table 3-1060** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses**Status code: 200**

OK

```
{
  "datapoints": [ {
    "average": 5,
    "timestamp": 1665304920000,
    "unit": "Byte"
  } ]
}
```

Status code: 400

Bad Request

```
{
  "error_code": "APIG.2012",
  "error_msg": "Invalid parameter value,parameterName:api_id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code": "APIG.1002",
  "error_msg": "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code": "APIG.1005",
  "error_msg": "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code": "APIG.3002",
  "error_msg": "API 39bce6d25a3f470e8cf7b2c97174f7d9 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error CodesSee [Error Codes](#).

3.19.3 Querying API Calls Under an API Group in the Last One Hour

Function

This API is used to query the total number of times all APIs in an API group are called based on the API group ID. The query is based on 1 minute. If the time range is within one hour, the server returns the number of API calls made every minute.

NOTE

For security purposes, clear your operation records, including but not limited to records in the `~/.bash_history` and `/var/log/messages` directories (if any), after running the curl command on the server to query information.

Calling MethodFor details, see [Calling APIs](#).**URI**GET `/v2/{project_id}/apigw/instances/{instance_id}/statistics/group/latest`

Table 3-1061 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-1062 Query Parameters

Parameter	Mandatory	Type	Description
group_id	Yes	String	API group ID.

Request Parameters

Table 3-1063 Request header parameters

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

Response Parameters

Status code: 200

Table 3-1064 Response body parameters

Parameter	Type	Description
code	String	Response code.
msg	String	Response message.
start_time	Long	Timestamp (UTC) of the start time.
end_time	Long	Timestamp (UTC) of the end time.

Parameter	Type	Description
list	Array of StatisticsGroup objects	Statistic data.

Table 3-1065 StatisticsGroup

Parameter	Type	Description
max_latency	Integer	Maximum latency. Unit: ms
avg_latency	Float	Average latency. Unit: ms
req_count	Integer	Total number of requests.
req_count2xx	Integer	Total number of 2xx response codes.
req_count4xx	Integer	Total number of 4xx response codes.
req_count5xx	Integer	Total number of 5xx response codes.
req_count_error	Integer	Errors.
output_throughput	Long	Downstream throughput (bytes).
input_throughput	Long	Upstream throughput (bytes).
current_minute	Long	Timestamp (UTC) of API access.
group_id	String	API group ID.
provider	String	API provider.
req_time	String	Request time.
register_time	String	Recording time.

Status code: 400

Table 3-1066 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-1067 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1068 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1069 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1070 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "code": "APIG.0000",
  "start_time": 1595574540,
  "end_time": 1595578080,
  "list": [ {
    "avg_latency": 4.14,
    "current_minute": 1595576640,
    "group_id": "d0fc4e40b7d1492cba802f667c7c7226",
    "input_throughput": 1071,
    "max_latency": 14,
    "output_throughput": 3790,
    "provider": "73d69ae0cfcf460190522d06b60f05ad",
    "register_time": "2020-07-24 15:44:56",
    "req_count": 7,
    "req_count2xx": 0,
    "req_count4xx": 6,
    "req_count5xx": 1,
    "req_count_error": 7,
    "req_time": "2020-07-24 15:44:00"
  }, {
    "avg_latency": 3.67,
    "current_minute": 1595577900,
    "group_id": "d0fc4e40b7d1492cba802f667c7c7226",
    "input_throughput": 915,
    "max_latency": 6,
    "output_throughput": 2763,
    "provider": "73d69ae0cfcf460190522d06b60f05ad",
    "register_time": "2020-07-24 16:05:12",
    "req_count": 6,
    "req_count2xx": 3,
    "req_count4xx": 0,
    "req_count5xx": 3,
    "req_count_error": 3,
    "req_time": "2020-07-24 16:05:00"
  } ]
}
```

Status code: 400

Bad Request

```
{
  "error_code": "APIG.2012",
  "error_msg": "Invalid parameter value,parameterName:group_id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code": "APIG.1002",
  "error_msg": "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code": "APIG.1005",
}
```

```
{  
  "error_msg": "No permissions to request this method"  
}
```

Status code: 404

Not Found

```
{  
  "error_code": "APIG.3001",  
  "error_msg": "API group d0fc4e40b7d1492cba802f667c7c7226 does not exist"  
}
```

Status code: 500

Internal Server Error

```
{  
  "error_code": "APIG.9999",  
  "error_msg": "System error"  
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.20 Group Response Management

3.20.1 Creating a Group Response

Function

This API is used to create a response for an API group.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances/{instance_id}/api-groups/{group_id}/gateway-responses

Table 3-1071 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
group_id	Yes	String	API group ID.

Request Parameters

Table 3-1072 Request header parameters

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

Table 3-1073 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Response name. Enter 1 to 64 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.

Parameter	Mandatory	Type	Description
responses	No	Map<String, ResponseInfo >	<p>Response type definition. key indicates the error type. Options of key:</p> <ul style="list-style-type: none"> • AUTH_FAILURE: Authentication failed. • AUTH_HEADER_MISSING: The identity source is missing. • AUTHORIZER_FAILURE: Custom authentication failed. • AUTHORIZER_CONF_FAILURE: Custom authorizer error. • AUTHORIZER_IDENTITIES_FAILURE: The identity source of the custom authorizer is invalid. • BACKEND_UNAVAILABLE: The backend is unavailable. • BACKEND_TIMEOUT: Backend timed out. • THROTTLED: The request was rejected due to request throttling. • UNAUTHORIZED: The app you are using has not been authorized to call the API. • ACCESS_DENIED: Access denied. • NOT_FOUND: No API is found. • REQUEST_PARAMETERS_FAILURE: Invalid request parameter. • DEFAULT_4XX: Default 4XX error occurred. • DEFAULT_5XX: Default 5XX error occurred. • THIRD_AUTH_FAILURE: Third-party authentication failed. • THIRD_AUTH_IDENTITIES_FAILURE: Identity source of the third-party authorizer is invalid.

Parameter	Mandatory	Type	Description
			<ul style="list-style-type: none"> THIRD_AUTH_CONF_FAILURE: Third-party authorizer configuration error. Each error type is in JSON format.

Table 3-1074 ResponseInfo

Parameter	Mandatory	Type	Description
status	No	Integer	HTTP status code of the response. The value ranges from 200 to 599, but cannot be 444.
body	No	String	Response body template.

Response Parameters

Status code: 201

Table 3-1075 Response body parameters

Parameter	Type	Description
name	String	Response name.

Parameter	Type	Description
responses	Map<String,ResponseInfo>	<p>Response type definition. key indicates the error type. Options of key:</p> <ul style="list-style-type: none"> ● AUTH_FAILURE: Authentication failed. ● AUTH_HEADER_MISSING: The identity source is missing. ● AUTHORIZER_FAILURE: Custom authentication failed. ● AUTHORIZER_CONF_FAILURE: Custom authorizer error. ● AUTHORIZER_IDENTITY_FAILURE: The identity source of the custom authorizer is invalid. ● BACKEND_UNAVAILABLE: The backend is unavailable. ● BACKEND_TIMEOUT: Backend timed out. ● THROTTLED: The request was rejected due to request throttling. ● UNAUTHORIZED: The app you are using has not been authorized to call the API. ● ACCESS_DENIED: Access denied. ● NOT_FOUND: No API is found. ● REQUEST_PARAMETERS_FAILURE: Invalid request parameter. ● DEFAULT_4XX: Default 4XX error occurred. ● DEFAULT_5XX: Default 5XX error occurred. ● THIRD_AUTH_FAILURE: Third-party authentication failed. ● THIRD_AUTH_IDENTITY_FAILURE: Identity source of the third-party authorizer is invalid. ● THIRD_AUTH_CONF_FAILURE: Third-party authorizer configuration error. <p>Each error type is in JSON format.</p>
id	String	Response ID.
default	Boolean	Indicates whether the group response is the default response.
create_time	String	Creation time.
update_time	String	Update time.

Table 3-1076 ResponseInfoResp

Parameter	Type	Description
status	Integer	HTTP status code of the response. The value ranges from 200 to 599, but cannot be 444.
body	String	Response body template.
default	Boolean	Indicates whether the response is the default response.

Status code: 400

Table 3-1077 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-1078 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1079 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1080 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1081 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Creating a response for an API group

```
{
  "name" : "response_demo"
}
```

Example Responses

Status code: 201

Created

```
{
  "create_time" : "2020-08-12T14:52:02.829753306+08:00",
  "update_time" : "2020-08-12T14:52:02.829753306+08:00",
  "default" : false,
  "id" : "e839b367e10f4ab19d1c5008e476b83a",
  "name" : "response_demo",
  "responses" : {
    "ACCESS_DENIED" : {
      "body" : "{\"error_code\": \"${context.error.code}\", \"error_msg\": \"${context.error.message}\", \"request_id\": \"${context.requestId}\"}",
      "default" : true,
      "status" : 403
    },
    "AUTHORIZER_CONF_FAILURE" : {
      "body" : "{\"error_code\": \"${context.error.code}\", \"error_msg\": \"${context.error.message}\", \"request_id\": \"${context.requestId}\"}",
      "default" : true,
      "status" : 500
    },
    "AUTHORIZER_FAILURE" : {
      "body" : "{\"error_code\": \"${context.error.code}\", \"error_msg\": \"${context.error.message}\", \"request_id\": \"${context.requestId}\"}",
      "default" : true,
      "status" : 500
    },
    "AUTHORIZER_IDENTITY_FAILURE" : {
      "body" : "{\"error_code\": \"${context.error.code}\", \"error_msg\": \"${context.error.message}\", \"request_id"
```

```

\":"$context.requestId\""},
  "default" : true,
  "status" : 401
},
"AUTH_FAILURE" : {
  "body" : "{\"error_code\":\"$context.error.code\",\"error_msg\":\"$context.error.message\",\"request_id
\":"$context.requestId\""},
  "default" : true,
  "status" : 401
},
"AUTH_HEADER_MISSING" : {
  "body" : "{\"error_code\":\"$context.error.code\",\"error_msg\":\"$context.error.message\",\"request_id
\":"$context.requestId\""},
  "default" : true,
  "status" : 401
},
"BACKEND_TIMEOUT" : {
  "body" : "{\"error_code\":\"$context.error.code\",\"error_msg\":\"$context.error.message\",\"request_id
\":"$context.requestId\""},
  "default" : true,
  "status" : 504
},
"BACKEND_UNAVAILABLE" : {
  "body" : "{\"error_code\":\"$context.error.code\",\"error_msg\":\"$context.error.message\",\"request_id
\":"$context.requestId\""},
  "default" : true,
  "status" : 502
},
"DEFAULT_4XX" : {
  "body" : "{\"error_code\":\"$context.error.code\",\"error_msg\":\"$context.error.message\",\"request_id
\":"$context.requestId\""},
  "default" : true
},
"DEFAULT_5XX" : {
  "body" : "{\"error_code\":\"$context.error.code\",\"error_msg\":\"$context.error.message\",\"request_id
\":"$context.requestId\""},
  "default" : true
},
"NOT_FOUND" : {
  "body" : "{\"error_code\":\"$context.error.code\",\"error_msg\":\"$context.error.message\",\"request_id
\":"$context.requestId\""},
  "default" : true,
  "status" : 404
},
"REQUEST_PARAMETERS_FAILURE" : {
  "body" : "{\"error_code\":\"$context.error.code\",\"error_msg\":\"$context.error.message\",\"request_id
\":"$context.requestId\""},
  "default" : true,
  "status" : 400
},
"THROTTLED" : {
  "body" : "{\"error_code\":\"$context.error.code\",\"error_msg\":\"$context.error.message\",\"request_id
\":"$context.requestId\""},
  "default" : true,
  "status" : 429
},
"UNAUTHORIZED" : {
  "body" : "{\"error_code\":\"$context.error.code\",\"error_msg\":\"$context.error.message\",\"request_id
\":"$context.requestId\""},
  "default" : true,
  "status" : 401
},
"THIRD_AUTH_FAILURE" : {
  "body" : "{\"error_code\":\"$context.error.code\",\"error_msg\":\"$context.error.message\",\"request_id
\":"$context.requestId\""},
  "default" : true,
  "status" : 401
},
"THIRD_AUTH_IDENTITY_FAILURE" : {

```

```

"body" : "{\\"error_code\\":\\"$context.error.code\\",\\"error_msg\\":\\"$context.error.message\\",\\"request_id\\":\\"$context.requestId\\"}",
  "default" : true,
  "status" : 401
},
"THIRD_AUTH_CONF_FAILURE" : {
  "body" : "{\\"error_code\\":\\"$context.error.code\\",\\"error_msg\\":\\"$context.error.message\\",\\"request_id\\":\\"$context.requestId\\"}",
  "default" : true,
  "status" : 500
}
}
}

```

Status code: 400

Bad Request

```

{
  "error_code" : "APIG.2011",
  "error_msg" : "Invalid parameter value,parameterName:name. Please refer to the support documentation"
}

```

Status code: 401

Unauthorized

```

{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}

```

Status code: 403

Forbidden

```

{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}

```

Status code: 404

Not Found

```

{
  "error_code" : "APIG.3001",
  "error_msg" : "API group c77f5e81d9cb4424bf704ef2b0ac7600 does not exist"
}

```

Status code: 500

Internal Server Error

```

{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}

```

Status Codes

Status Code	Description
201	Created

Status Code	Description
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.20.2 Querying Group Response Details

Function

This API is used to query the details of a response defined for an API group.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/api-groups/{group_id}/gateway-responses/{response_id}

Table 3-1082 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
group_id	Yes	String	API group ID.
response_id	Yes	String	Response ID.

Request Parameters

Table 3-1083 Request header parameters

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

Response Parameters

Status code: 200

Table 3-1084 Response body parameters

Parameter	Type	Description
name	String	Response name.

Parameter	Type	Description
responses	Map<String,ResponseInfo>	<p>Response type definition. key indicates the error type. Options of key:</p> <ul style="list-style-type: none"> ● AUTH_FAILURE: Authentication failed. ● AUTH_HEADER_MISSING: The identity source is missing. ● AUTHORIZER_FAILURE: Custom authentication failed. ● AUTHORIZER_CONF_FAILURE: Custom authorizer error. ● AUTHORIZER_IDENTITY_FAILURE: The identity source of the custom authorizer is invalid. ● BACKEND_UNAVAILABLE: The backend is unavailable. ● BACKEND_TIMEOUT: Backend timed out. ● THROTTLED: The request was rejected due to request throttling. ● UNAUTHORIZED: The app you are using has not been authorized to call the API. ● ACCESS_DENIED: Access denied. ● NOT_FOUND: No API is found. ● REQUEST_PARAMETERS_FAILURE: Invalid request parameter. ● DEFAULT_4XX: Default 4XX error occurred. ● DEFAULT_5XX: Default 5XX error occurred. ● THIRD_AUTH_FAILURE: Third-party authentication failed. ● THIRD_AUTH_IDENTITY_FAILURE: Identity source of the third-party authorizer is invalid. ● THIRD_AUTH_CONF_FAILURE: Third-party authorizer configuration error. <p>Each error type is in JSON format.</p>
id	String	Response ID.
default	Boolean	Indicates whether the group response is the default response.
create_time	String	Creation time.
update_time	String	Update time.

Table 3-1085 ResponseInfoResp

Parameter	Type	Description
status	Integer	HTTP status code of the response. The value ranges from 200 to 599, but cannot be 444.
body	String	Response body template.
default	Boolean	Indicates whether the response is the default response.

Status code: 400

Table 3-1086 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-1087 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1088 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1089 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1090 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

Created

```
{
  "create_time": "2020-08-12T06:52:02Z",
  "update_time": "2020-08-12T06:52:02Z",
  "default": false,
  "id": "e839b367e10f4ab19d1c5008e476b83a",
  "name": "response_demo",
  "responses": {
    "ACCESS_DENIED": {
      "body": "{\\"error_code\\":\\"$context.error.code\\",\\"error_msg\\":\\"$context.error.message\\",\\"request_id\\":\\"$context.requestId\\"}",
      "default": true,
      "status": 403
    },
    "AUTHORIZER_CONF_FAILURE": {
      "body": "{\\"error_code\\":\\"$context.error.code\\",\\"error_msg\\":\\"$context.error.message\\",\\"request_id\\":\\"$context.requestId\\"}",
      "default": true,
      "status": 500
    },
    "AUTHORIZER_FAILURE": {
      "body": "{\\"error_code\\":\\"$context.error.code\\",\\"error_msg\\":\\"$context.error.message\\",\\"request_id\\":\\"$context.requestId\\"}",
      "default": true,
      "status": 500
    },
    "AUTHORIZER_IDENTITY_FAILURE": {
      "body": "{\\"error_code\\":\\"$context.error.code\\",\\"error_msg\\":\\"$context.error.message\\",\\"request_id\\":\\"$context.requestId\\"}",
      "default": true,
      "status": 401
    }
  }
}
```

```
"AUTH_FAILURE" : {
  "body" : "{\"error_code\":\"$context.error.code\",\"error_msg\":\"$context.error.message\",\"request_id\": \"$context.requestId\"}",
  "default" : true,
  "status" : 401
},
"AUTH_HEADER_MISSING" : {
  "body" : "{\"error_code\":\"$context.error.code\",\"error_msg\":\"$context.error.message\",\"request_id\": \"$context.requestId\"}",
  "default" : true,
  "status" : 401
},
"BACKEND_TIMEOUT" : {
  "body" : "{\"error_code\":\"$context.error.code\",\"error_msg\":\"$context.error.message\",\"request_id\": \"$context.requestId\"}",
  "default" : true,
  "status" : 504
},
"BACKEND_UNAVAILABLE" : {
  "body" : "{\"error_code\":\"$context.error.code\",\"error_msg\":\"$context.error.message\",\"request_id\": \"$context.requestId\"}",
  "default" : true,
  "status" : 502
},
"DEFAULT_4XX" : {
  "body" : "{\"error_code\":\"$context.error.code\",\"error_msg\":\"$context.error.message\",\"request_id\": \"$context.requestId\"}",
  "default" : true
},
"DEFAULT_5XX" : {
  "body" : "{\"error_code\":\"$context.error.code\",\"error_msg\":\"$context.error.message\",\"request_id\": \"$context.requestId\"}",
  "default" : true
},
"NOT_FOUND" : {
  "body" : "{\"error_code\":\"$context.error.code\",\"error_msg\":\"$context.error.message\",\"request_id\": \"$context.requestId\"}",
  "default" : true,
  "status" : 404
},
"REQUEST_PARAMETERS_FAILURE" : {
  "body" : "{\"error_code\":\"$context.error.code\",\"error_msg\":\"$context.error.message\",\"request_id\": \"$context.requestId\"}",
  "default" : true,
  "status" : 400
},
"THROTTLED" : {
  "body" : "{\"error_code\":\"$context.error.code\",\"error_msg\":\"$context.error.message\",\"request_id\": \"$context.requestId\"}",
  "default" : true,
  "status" : 429
},
"UNAUTHORIZED" : {
  "body" : "{\"error_code\":\"$context.error.code\",\"error_msg\":\"$context.error.message\",\"request_id\": \"$context.requestId\"}",
  "default" : true,
  "status" : 401
},
"THIRD_AUTH_FAILURE" : {
  "body" : "{\"error_code\":\"$context.error.code\",\"error_msg\":\"$context.error.message\",\"request_id\": \"$context.requestId\"}",
  "default" : true,
  "status" : 401
},
"THIRD_AUTH_IDENTITIES_FAILURE" : {
  "body" : "{\"error_code\":\"$context.error.code\",\"error_msg\":\"$context.error.message\",\"request_id\": \"$context.requestId\"}",
  "default" : true,
  "status" : 401
}
```

```

    },
    "THIRD_AUTH_CONF_FAILURE" : {
      "body" : {"error_code": "{$context.error.code}", "error_msg": "{$context.error.message}", "request_id": "{$context.requestId}"},
      "default" : true,
      "status" : 500
    }
  }
}

```

Status code: 400

Bad Request

```

{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:group_id. Please refer to the support documentation"
}

```

Status code: 401

Unauthorized

```

{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}

```

Status code: 403

Forbidden

```

{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}

```

Status code: 404

Not Found

```

{
  "error_code" : "APIG.3001",
  "error_msg" : "API group c77f5e81d9cb4424bf704ef2b0ac7600 does not exist"
}

```

Status code: 500

Internal Server Error

```

{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}

```

Status Codes

Status Code	Description
200	Created
400	Bad Request
401	Unauthorized

Status Code	Description
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.20.3 Modifying a Group Response

Function

This API is used to modify a response of an API group.

Calling Method

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

URI

PUT /v2/{project_id}/apigw/instances/{instance_id}/api-groups/{group_id}/gateway-responses/{response_id}

Table 3-1091 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
group_id	Yes	String	API group ID.
response_id	Yes	String	Response ID.

Request Parameters

Table 3-1092 Request header parameters

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

Table 3-1093 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Response name. Enter 1 to 64 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.

Parameter	Mandatory	Type	Description
responses	No	Map<String, ResponseInfo >	<p>Response type definition. key indicates the error type. Options of key:</p> <ul style="list-style-type: none"> • AUTH_FAILURE: Authentication failed. • AUTH_HEADER_MISSING: The identity source is missing. • AUTHORIZER_FAILURE: Custom authentication failed. • AUTHORIZER_CONF_FAILURE: Custom authorizer error. • AUTHORIZER_IDENTITY_FAILURE: The identity source of the custom authorizer is invalid. • BACKEND_UNAVAILABLE: The backend is unavailable. • BACKEND_TIMEOUT: Backend timed out. • THROTTLED: The request was rejected due to request throttling. • UNAUTHORIZED: The app you are using has not been authorized to call the API. • ACCESS_DENIED: Access denied. • NOT_FOUND: No API is found. • REQUEST_PARAMETERS_FAILURE: Invalid request parameter. • DEFAULT_4XX: Default 4XX error occurred. • DEFAULT_5XX: Default 5XX error occurred. • THIRD_AUTH_FAILURE: Third-party authentication failed. • THIRD_AUTH_IDENTITY_FAILURE: Identity source of the third-party authorizer is invalid.

Parameter	Mandatory	Type	Description
			<ul style="list-style-type: none"> THIRD_AUTH_CONF_FAILURE: Third-party authorizer configuration error. <p>Each error type is in JSON format.</p>

Table 3-1094 ResponseInfo

Parameter	Mandatory	Type	Description
status	No	Integer	HTTP status code of the response. The value ranges from 200 to 599, but cannot be 444.
body	No	String	Response body template.

Response Parameters

Status code: 200

Table 3-1095 Response body parameters

Parameter	Type	Description
name	String	Response name.

Parameter	Type	Description
responses	Map<String,ResponseInfo>	<p>Response type definition. key indicates the error type. Options of key:</p> <ul style="list-style-type: none"> ● AUTH_FAILURE: Authentication failed. ● AUTH_HEADER_MISSING: The identity source is missing. ● AUTHORIZER_FAILURE: Custom authentication failed. ● AUTHORIZER_CONF_FAILURE: Custom authorizer error. ● AUTHORIZER_IDENTITY_FAILURE: The identity source of the custom authorizer is invalid. ● BACKEND_UNAVAILABLE: The backend is unavailable. ● BACKEND_TIMEOUT: Backend timed out. ● THROTTLED: The request was rejected due to request throttling. ● UNAUTHORIZED: The app you are using has not been authorized to call the API. ● ACCESS_DENIED: Access denied. ● NOT_FOUND: No API is found. ● REQUEST_PARAMETERS_FAILURE: Invalid request parameter. ● DEFAULT_4XX: Default 4XX error occurred. ● DEFAULT_5XX: Default 5XX error occurred. ● THIRD_AUTH_FAILURE: Third-party authentication failed. ● THIRD_AUTH_IDENTITY_FAILURE: Identity source of the third-party authorizer is invalid. ● THIRD_AUTH_CONF_FAILURE: Third-party authorizer configuration error. <p>Each error type is in JSON format.</p>
id	String	Response ID.
default	Boolean	Indicates whether the group response is the default response.
create_time	String	Creation time.
update_time	String	Update time.

Table 3-1096 ResponseInfoResp

Parameter	Type	Description
status	Integer	HTTP status code of the response. The value ranges from 200 to 599, but cannot be 444.
body	String	Response body template.
default	Boolean	Indicates whether the response is the default response.

Status code: 400

Table 3-1097 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-1098 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1099 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1100 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1101 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Modifying a response of an API group

```
{
  "name": "response_demo"
}
```

Example Responses

Status code: 200

OK

```
{
  "create_time": "2020-08-12T06:52:02Z",
  "update_time": "2020-08-12T15:22:21.929863859+08:00",
  "default": false,
  "id": "e839b367e10f4ab19d1c5008e476b83a",
  "name": "response_demo",
  "responses": {
    "ACCESS_DENIED": {
      "body": "{\"error_code\": \"${context.error.code}\", \"error_msg\": \"${context.error.message}\", \"request_id\": \"${context.requestId}\"}",
      "default": true,
      "status": 403
    },
    "AUTHORIZER_CONF_FAILURE": {
      "body": "{\"error_code\": \"${context.error.code}\", \"error_msg\": \"${context.error.message}\", \"request_id\": \"${context.requestId}\"}",
      "default": true,
      "status": 500
    },
    "AUTHORIZER_FAILURE": {
      "body": "{\"error_code\": \"${context.error.code}\", \"error_msg\": \"${context.error.message}\", \"request_id\": \"${context.requestId}\"}",
      "default": true,
      "status": 500
    },
    "AUTHORIZER_IDENTITY_FAILURE": {
      "body": "{\"error_code\": \"${context.error.code}\", \"error_msg\": \"${context.error.message}\", \"request_id": \"${context.requestId}\"}"
    }
  }
}
```

```

\":"$context.requestId\}]",
  "default" : true,
  "status" : 401
},
"AUTH_FAILURE" : {
  "body" : "{\\"error_code\\":\\"$context.error.code\\",\\"error_msg\\":\\"$context.error.message\\",\\"request_id
\":"$context.requestId\}]",
  "default" : true,
  "status" : 401
},
"AUTH_HEADER_MISSING" : {
  "body" : "{\\"error_code\\":\\"$context.error.code\\",\\"error_msg\\":\\"$context.error.message\\",\\"request_id
\":"$context.requestId\}]",
  "default" : true,
  "status" : 401
},
"BACKEND_TIMEOUT" : {
  "body" : "{\\"error_code\\":\\"$context.error.code\\",\\"error_msg\\":\\"$context.error.message\\",\\"request_id
\":"$context.requestId\}]",
  "default" : true,
  "status" : 504
},
"BACKEND_UNAVAILABLE" : {
  "body" : "{\\"error_code\\":\\"$context.error.code\\",\\"error_msg\\":\\"$context.error.message\\",\\"request_id
\":"$context.requestId\}]",
  "default" : true,
  "status" : 502
},
"DEFAULT_4XX" : {
  "body" : "{\\"error_code\\":\\"$context.error.code\\",\\"error_msg\\":\\"$context.error.message\\",\\"request_id
\":"$context.requestId\}]",
  "default" : true
},
"DEFAULT_5XX" : {
  "body" : "{\\"error_code\\":\\"$context.error.code\\",\\"error_msg\\":\\"$context.error.message\\",\\"request_id
\":"$context.requestId\}]",
  "default" : true
},
"NOT_FOUND" : {
  "body" : "{\\"error_code\\":\\"$context.error.code\\",\\"error_msg\\":\\"$context.error.message\\",\\"request_id
\":"$context.requestId\}]",
  "default" : true,
  "status" : 404
},
"REQUEST_PARAMETERS_FAILURE" : {
  "body" : "{\\"error_code\\":\\"$context.error.code\\",\\"error_msg\\":\\"$context.error.message\\",\\"request_id
\":"$context.requestId\}]",
  "default" : true,
  "status" : 400
},
"THROTTLED" : {
  "body" : "{\\"error_code\\":\\"$context.error.code\\",\\"error_msg\\":\\"$context.error.message\\",\\"request_id
\":"$context.requestId\}]",
  "default" : true,
  "status" : 429
},
"UNAUTHORIZED" : {
  "body" : "{\\"error_code\\":\\"$context.error.code\\",\\"error_msg\\":\\"$context.error.message\\",\\"request_id
\":"$context.requestId\}]",
  "default" : true,
  "status" : 401
},
"THIRD_AUTH_FAILURE" : {
  "body" : "{\\"error_code\\":\\"$context.error.code\\",\\"error_msg\\":\\"$context.error.message\\",\\"request_id
\":"$context.requestId\}]",
  "default" : true,
  "status" : 401
},
"THIRD_AUTH_IDENTITIES_FAILURE" : {

```

```

"body" : "{\\"error_code\\":\\"$context.error.code\\",\\"error_msg\\":\\"$context.error.message\\",\\"request_id\\":\\"$context.requestId\\"}",
  "default" : true,
  "status" : 401
},
"THIRD_AUTH_CONF_FAILURE" : {
  "body" : "{\\"error_code\\":\\"$context.error.code\\",\\"error_msg\\":\\"$context.error.message\\",\\"request_id\\":\\"$context.requestId\\"}",
  "default" : true,
  "status" : 500
}
}
}

```

Status code: 400

Bad Request

```

{
  "error_code" : "APIG.2011",
  "error_msg" : "Invalid parameter value,parameterName:name. Please refer to the support documentation"
}

```

Status code: 401

Unauthorized

```

{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}

```

Status code: 403

Forbidden

```

{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}

```

Status code: 404

Not Found

```

{
  "error_code" : "APIG.3001",
  "error_msg" : "API group c77f5e81d9cb4424bf704ef2b0ac7600 does not exist"
}

```

Status code: 500

Internal Server Error

```

{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}

```

Status Codes

Status Code	Description
200	OK

Status Code	Description
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.20.4 Deleting a Group Response

Function

This API is used to delete a group response of an API group.

Calling Method

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

URI

DELETE /v2/{project_id}/apigw/instances/{instance_id}/api-groups/{group_id}/gateway-responses/{response_id}

Table 3-1102 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
group_id	Yes	String	API group ID.
response_id	Yes	String	Response ID.

Request Parameters

Table 3-1103 Request header parameters

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

Response Parameters

Status code: 400

Table 3-1104 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-1105 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1106 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1107 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1108 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:group_id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3001",
```

```
{
  "error_msg" : "API group c77f5e81d9cb4424bf704ef2b0ac7600 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
204	No Content
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.20.5 Querying the Response of an Error Type

Function

This API is used to query the response of an error type defined for an API group.

Calling Method

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

URI

```
GET /v2/{project_id}/apigw/instances/{instance_id}/api-groups/{group_id}/
gateway-responses/{response_id}/{response_type}
```


Table 3-1109 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
group_id	Yes	String	API group ID.
response_id	Yes	String	Response ID.

Parameter	Mandatory	Type	Description
response_type	Yes	String	<p>Error type. Options:</p> <ul style="list-style-type: none"> • AUTH_FAILURE: IAM or app authentication failed. • AUTH_HEADER_MISSING: The identity source is missing. • AUTHORIZER_FAILURE: Custom authentication failed. • AUTHORIZER_CONF_FAILURE: A custom authorizer error has occurred. For example, communication failed or an error response was returned. • AUTHORIZER_IDENTITIES_FAILURE: The identity source of the frontend custom authorizer is missing or invalid. • BACKEND_UNAVAILABLE: The backend is unavailable due to communication error. • BACKEND_TIMEOUT: Communication with the backend timed out. • THROTTLED: The request was rejected due to throttling. • UNAUTHORIZED: The credential you use is not authorized to call the API. • ACCESS_DENIED: Access denied. For example, the access control policy is triggered or an attack is detected. • NOT_FOUND: No API is matched. • REQUEST_PARAMETERS_FAILURE: Invalid request parameter or unsupported HTTP method. • DEFAULT_4XX: Another 4XX error occurred.

Parameter	Mandatory	Type	Description
			<ul style="list-style-type: none"> • DEFAULT_5XX: Another 5XX error occurred. • THIRD_AUTH_FAILURE: The third-party authorizer returns an authentication failure. • THIRD_AUTH_IDENTITY_FAILURE: The identity source of the third-party authorizer is missing or invalid. • THIRD_AUTH_CONFIG_FAILURE: A third-party authorizer error has occurred. For example, communication failed or an error response was returned. <p>Enumeration values:</p> <ul style="list-style-type: none"> • AUTH_FAILURE • AUTH_HEADER_MISSING • AUTHORIZER_FAILURE • AUTHORIZER_CONFIG_FAILURE • AUTHORIZER_IDENTITY_FAILURE • BACKEND_UNAVAILABLE • BACKEND_TIMEOUT • THROTTLED • UNAUTHORIZED • ACCESS_DENIED • NOT_FOUND • REQUEST_PARAMETERS_FAILURE • DEFAULT_4XX • DEFAULT_5XX • THIRD_AUTH_FAILURE • THIRD_AUTH_IDENTITY_FAILURE • THIRD_AUTH_CONFIG_FAILURE

Request Parameters

Table 3-1110 Request header parameters

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

Response Parameters

Status code: 200

Table 3-1111 Response body parameters

Parameter	Type	Description
{User defined key}	Map<String,ResponseInfoResp>	OK

Table 3-1112 ResponseInfoResp

Parameter	Type	Description
status	Integer	HTTP status code of the response. The value ranges from 200 to 599, but cannot be 444.
body	String	Response body template.
default	Boolean	Indicates whether the response is the default response.

Status code: 400

Table 3-1113 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-1114 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1115 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1116 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1117 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "ACCESS_DENIED" : {
```

```
"body" : "{ \"error_code\" : \"${context.error.code}\", \"error_msg\" : \"${context.error.message}\", \"request_id\" : \"${context.requestId}\" }",
  "default" : true,
  "status" : 403
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:group_id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3001",
  "error_msg" : "API group c77f5e81d9cb4424bf704ef2b0ac7600 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden

Status Code	Description
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.20.6 Modifying the Response of an Error Type

Function

This API is used to modify the response of an error type defined for an API group.

Calling Method

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

URI

PUT /v2/{project_id}/apigw/instances/{instance_id}/api-groups/{group_id}/gateway-responses/{response_id}/{response_type}

Table 3-1118 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
group_id	Yes	String	API group ID.
response_id	Yes	String	Response ID.

Parameter	Mandatory	Type	Description
response_type	Yes	String	<p>Error type. Options:</p> <ul style="list-style-type: none"> • AUTH_FAILURE: IAM or app authentication failed. • AUTH_HEADER_MISSING: The identity source is missing. • AUTHORIZER_FAILURE: Custom authentication failed. • AUTHORIZER_CONF_FAILURE: A custom authorizer error has occurred. For example, communication failed or an error response was returned. • AUTHORIZER_IDENTITY_FAILURE: The identity source of the frontend custom authorizer is missing or invalid. • BACKEND_UNAVAILABLE: The backend is unavailable due to communication error. • BACKEND_TIMEOUT: Communication with the backend timed out. • THROTTLED: The request was rejected due to throttling. • UNAUTHORIZED: The credential you use is not authorized to call the API. • ACCESS_DENIED: Access denied. For example, the access control policy is triggered or an attack is detected. • NOT_FOUND: No API is matched. • REQUEST_PARAMETERS_FAILURE: Invalid request parameter or unsupported HTTP method. • DEFAULT_4XX: Another 4XX error occurred.

Parameter	Mandatory	Type	Description
			<ul style="list-style-type: none"> • DEFAULT_5XX: Another 5XX error occurred. • THIRD_AUTH_FAILURE: The third-party authorizer returns an authentication failure. • THIRD_AUTH_IDENTITY_FAILURE: The identity source of the third-party authorizer is missing or invalid. • THIRD_AUTH_CONFIG_FAILURE: A third-party authorizer error has occurred. For example, communication failed or an error response was returned. <p>Enumeration values:</p> <ul style="list-style-type: none"> • AUTH_FAILURE • AUTH_HEADER_MISSING • AUTHORIZER_FAILURE • AUTHORIZER_CONFIG_FAILURE • AUTHORIZER_IDENTITY_FAILURE • BACKEND_UNAVAILABLE • BACKEND_TIMEOUT • THROTTLED • UNAUTHORIZED • ACCESS_DENIED • NOT_FOUND • REQUEST_PARAMETERS_FAILURE • DEFAULT_4XX • DEFAULT_5XX • THIRD_AUTH_FAILURE • THIRD_AUTH_IDENTITY_FAILURE • THIRD_AUTH_CONFIG_FAILURE

Request Parameters

Table 3-1119 Request header parameters

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

Table 3-1120 Request body parameters

Parameter	Mandatory	Type	Description
status	No	Integer	HTTP status code of the response. The value ranges from 200 to 599, but cannot be 444.
body	No	String	Response body template.

Response Parameters

Status code: 200

Table 3-1121 Response body parameters

Parameter	Type	Description
{User defined key}	Map<String, ResponseInfoResp >	OK

Table 3-1122 ResponseInfoResp

Parameter	Type	Description
status	Integer	HTTP status code of the response. The value ranges from 200 to 599, but cannot be 444.
body	String	Response body template.
default	Boolean	Indicates whether the response is the default response.

Status code: 400

Table 3-1123 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-1124 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1125 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1126 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1127 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Modifying the response of an error type defined for an API group

```
{
  "body": "body: {\\"error_code\\":\\"$context.error.code\\",\\"error_msg\\":\\"$context.error.message\\",\\"request_id\\":\\"$context.requestId\\"}\\"",
  "status": 403
}
```

Example Responses

Status code: 200

OK

```
{
  "ACCESS_DENIED" : {
    "body": "{\\"error_code\\":\\"$context.error.code\\",\\"error_msg\\":\\"$context.error.message\\",\\"request_id\\":\\"$context.requestId\\"}",
    "default": true,
    "status": 403
  }
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:group_id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3001",
  "error_msg" : "API group c77f5e81d9cb4424bf704ef2b0ac7600 does not exist"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
```

```
"error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.20.7 Deleting the Response of an Error Type

Function

This API is used to delete the response of an error type defined for an API group. After the response is deleted, the default response of the error type is used.

Calling Method

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

URI

DELETE /v2/{project_id}/apigw/instances/{instance_id}/api-groups/{group_id}/gateway-responses/{response_id}/{response_type}

Table 3-1128 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Parameter	Mandatory	Type	Description
group_id	Yes	String	API group ID.
response_id	Yes	String	Response ID.

Parameter	Mandatory	Type	Description
response_type	Yes	String	<p>Error type. Options:</p> <ul style="list-style-type: none"> • AUTH_FAILURE: IAM or app authentication failed. • AUTH_HEADER_MISSING: The identity source is missing. • AUTHORIZER_FAILURE: Custom authentication failed. • AUTHORIZER_CONF_FAILURE: A custom authorizer error has occurred. For example, communication failed or an error response was returned. • AUTHORIZER_IDENTITY_FAILURE: The identity source of the frontend custom authorizer is missing or invalid. • BACKEND_UNAVAILABLE: The backend is unavailable due to communication error. • BACKEND_TIMEOUT: Communication with the backend timed out. • THROTTLED: The request was rejected due to throttling. • UNAUTHORIZED: The credential you use is not authorized to call the API. • ACCESS_DENIED: Access denied. For example, the access control policy is triggered or an attack is detected. • NOT_FOUND: No API is matched. • REQUEST_PARAMETERS_FAILURE: Invalid request parameter or unsupported HTTP method. • DEFAULT_4XX: Another 4XX error occurred.

Parameter	Mandatory	Type	Description
			<ul style="list-style-type: none"> • DEFAULT_5XX: Another 5XX error occurred. • THIRD_AUTH_FAILURE: The third-party authorizer returns an authentication failure. • THIRD_AUTH_IDENTITY_FAILURE: The identity source of the third-party authorizer is missing or invalid. • THIRD_AUTH_CONFIG_FAILURE: A third-party authorizer error has occurred. For example, communication failed or an error response was returned. <p>Enumeration values:</p> <ul style="list-style-type: none"> • AUTH_FAILURE • AUTH_HEADER_MISSING • AUTHORIZER_FAILURE • AUTHORIZER_CONFIG_FAILURE • AUTHORIZER_IDENTITY_FAILURE • BACKEND_UNAVAILABLE • BACKEND_TIMEOUT • THROTTLED • UNAUTHORIZED • ACCESS_DENIED • NOT_FOUND • REQUEST_PARAMETERS_FAILURE • DEFAULT_4XX • DEFAULT_5XX • THIRD_AUTH_FAILURE • THIRD_AUTH_IDENTITY_FAILURE • THIRD_AUTH_CONFIG_FAILURE

Request Parameters

Table 3-1129 Request header parameters

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

Response Parameters

Status code: 400

Table 3-1130 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-1131 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1132 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1133 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1134 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:group_id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3001",
```

```
{  
  "error_msg" : "API group c77f5e81d9cb4424bf704ef2b0ac7600 does not exist"  
}
```

Status code: 500

Internal Server Error

```
{  
  "error_code" : "APIG.9999",  
  "error_msg" : "System error"  
}
```

Status Codes

Status Code	Description
204	No Content
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.20.8 Querying Group Responses

Function

This API is used to query the responses of an API group.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/api-groups/{group_id}/
gateway-responses

Table 3-1135 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.
group_id	Yes	String	API group ID.

Table 3-1136 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20

Request Parameters

Table 3-1137 Request header parameters

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

Response Parameters

Status code: 200

Table 3-1138 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
responses	Array of ResponsesInfo objects	Response list.

Table 3-1139 ResponsesInfo

Parameter	Type	Description
name	String	Response name.

Parameter	Type	Description
responses	Map<String,ResponseInfo>	<p>Response type definition. key indicates the error type. Options of key:</p> <ul style="list-style-type: none"> ● AUTH_FAILURE: Authentication failed. ● AUTH_HEADER_MISSING: The identity source is missing. ● AUTHORIZER_FAILURE: Custom authentication failed. ● AUTHORIZER_CONF_FAILURE: Custom authorizer error. ● AUTHORIZER_IDENTITIES_FAILURE: The identity source of the custom authorizer is invalid. ● BACKEND_UNAVAILABLE: The backend is unavailable. ● BACKEND_TIMEOUT: Backend timed out. ● THROTTLED: The request was rejected due to request throttling. ● UNAUTHORIZED: The app you are using has not been authorized to call the API. ● ACCESS_DENIED: Access denied. ● NOT_FOUND: No API is found. ● REQUEST_PARAMETERS_FAILURE: Invalid request parameter. ● DEFAULT_4XX: Default 4XX error occurred. ● DEFAULT_5XX: Default 5XX error occurred. ● THIRD_AUTH_FAILURE: Third-party authentication failed. ● THIRD_AUTH_IDENTITIES_FAILURE: Identity source of the third-party authorizer is invalid. ● THIRD_AUTH_CONF_FAILURE: Third-party authorizer configuration error. <p>Each error type is in JSON format.</p>
id	String	Response ID.
default	Boolean	Indicates whether the group response is the default response.
create_time	String	Creation time.
update_time	String	Update time.

Table 3-1140 ResponseInfoResp

Parameter	Type	Description
status	Integer	HTTP status code of the response. The value ranges from 200 to 599, but cannot be 444.
body	String	Response body template.
default	Boolean	Indicates whether the response is the default response.

Status code: 400

Table 3-1141 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-1142 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1143 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1144 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1145 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total" : 2,
  "size" : 2,
  "responses" : [ {
    "create_time" : "2020-08-12T06:52:02Z",
    "default" : false,
    "id" : "e839b367e10f4ab19d1c5008e476b83a",
    "name" : "response_demo",
    "update_time" : "2020-08-12T06:52:02Z"
  }, {
    "create_time" : "2020-07-31T11:39:23Z",
    "default" : true,
    "id" : "ed8e8c52ab0e4a1c9c809268e5002e64",
    "name" : "default",
    "update_time" : "2020-07-31T11:39:23Z"
  } ]
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:group_id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized


```
{  
  "error_code" : "APIG.1002",  
  "error_msg" : "Incorrect token or token resolution failed"  
}
```

Status code: 403

Forbidden

```
{  
  "error_code" : "APIG.1005",  
  "error_msg" : "No permissions to request this method"  
}
```

Status code: 404

Not Found

```
{  
  "error_code" : "APIG.3001",  
  "error_msg" : "API group c77f5e81d9cb4424bf704ef2b0ac7600 does not exist"  
}
```

Status code: 500

Internal Server Error

```
{  
  "error_code" : "APIG.9999",  
  "error_msg" : "System error"  
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.21 Tag Management

3.21.1 Querying Tags

Function

This API is used to query tags of a gateway.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/tags

Table 3-1146 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-1147 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20

Request Parameters

Table 3-1148 Request header parameters

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

Response Parameters

Status code: 200

Table 3-1149 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
tags	Array of strings	Tag list.

Status code: 400

Table 3-1150 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-1151 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1152 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1153 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1154 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{  
  "total" : 2,  
  "size" : 2,  
  "tags" : [ "webApi", "functionApi" ]  
}
```

Status code: 400

Bad Request

```
{  
  "error_code" : "APIG.2012",
```

```
"error_msg" : "Invalid parameter value,parameterName:instance_id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3030",
  "error_msg" : "The instance does not exist;id:eddc4d25480b4cd6b512f270a1b8b341"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.22 Gateway Feature Management

3.22.1 Configuring a Feature for a Gateway

Function

This API is used to configure a feature for a gateway.

For details about the supported features and configuration examples, see "Appendix" > "Supported Features" in this document.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances/{instance_id}/features

Table 3-1155 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-1156 Request header parameters

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

Table 3-1157 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Feature name. Minimum: 1 Maximum: 64
enable	Yes	Boolean	Indicates whether to enable the feature.
config	No	String	Parameter configuration.

Response Parameters

Status code: 201

Table 3-1158 Response body parameters

Parameter	Type	Description
id	String	Feature ID.
name	String	Feature name. Minimum: 1 Maximum: 64
enable	Boolean	Indicates whether to enable the feature.
config	String	Parameter configuration.
instance_id	String	Gateway ID.
update_time	String	Feature update time.

Status code: 400

Table 3-1159 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-1160 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1161 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1162 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1163 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Enabling the app_api_key switch

```
{
  "name" : "app_api_key",
  "config" : "on",
  "enable" : true
}
```


Example Responses

Status code: 201

Created

```
{
  "config" : "on",
  "enable" : true,
  "id" : "db9a9260cd3e4a16a9b5747a65d3ffaa",
  "instance_id" : "eddc4d25480b4cd6b512f270a1b8b341",
  "name" : "app_api_key",
  "update_time" : "2020-08-24T01:17:31.041984021Z"
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIG.2000",
  "error_msg" : "unrecognized feature app-api-key"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIG.3030",
  "error_msg" : "The instance does not exist;id:eddc4d25480b4cd6b512f270a1b8b341"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}
```

Status Codes

Status Code	Description
201	Created

Status Code	Description
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.22.2 Querying Gateway Features

Function

This API is used to query the features of a gateway. If a gateway does not support the features listed in the following table, contact technical support to upgrade the gateway.

For details about the supported features and configuration examples, see "Appendix" > "Supported Features" in this document.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/features

Table 3-1164 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-1165 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20

Request Parameters

Table 3-1166 Request header parameters

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

Response Parameters

Status code: **200**

Table 3-1167 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
features	Array of FeatureInfo objects	Feature list.

Table 3-1168 FeatureInfo

Parameter	Type	Description
id	String	Feature ID.
name	String	Feature name. Minimum: 1 Maximum: 64
enable	Boolean	Indicates whether to enable the feature.
config	String	Parameter configuration.
instance_id	String	Gateway ID.
update_time	String	Feature update time.

Status code: 400

Table 3-1169 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-1170 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1171 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1172 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1173 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total": 1,
  "size": 1,
  "features": [ {
    "config": "on",
    "enable": true,
    "id": "db9a9260cd3e4a16a9b5747a65d3ffaa",
    "instance_id": "eddc4d25480b4cd6b512f270a1b8b341",
    "name": "app_api_key",
    "update_time": "2020-08-24T01:17:31.041984Z"
  } ]
}
```

Status code: 400

Bad Request

```
{
  "error_code": "APIG.2012",
  "error_msg": "Invalid parameter value,parameterName:instance_id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code": "APIG.1002",
```

```
{
  "error_msg": "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code": "APIG.1005",
  "error_msg": "No permissions to request this method"
}
```

Status code: 404

Not Found

```
{
  "error_code": "APIG.3030",
  "error_msg": "The instance does not exist;id:eddc4d25480b4cd6b512f270a1b8b341"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code": "APIG.9999",
  "error_msg": "System error"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.23 Configuration Management

3.23.1 Querying Resource Configurations of a Gateway

Function

This API is used to query the resource configurations and usage of a gateway.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/project/configs

Table 3-1174 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Table 3-1175 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20

Request Parameters

Table 3-1176 Request header parameters

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

Response Parameters

Status code: 200

Table 3-1177 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
configs	Array of Config objects	Quota list.

Table 3-1178 Config

Parameter	Type	Description
config_id	String	Quota ID.

Parameter	Type	Description
config_name	String	<p>Quota name.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • API_NUM_LIMIT • APP_NUM_LIMIT • APIGROUP_NUM_LIMIT • ENVIRONMENT_NUM_LIMIT • VARIABLE_NUM_LIMIT • SIGN_NUM_LIMIT • THROTTLE_NUM_LIMIT • APIGROUP_DOMAIN_NUM_LIMIT • API_VERSION_NUM_LIMIT • VPC_NUM_LIMIT • VPC_INSTANCE_NUM_LIMIT • API_PARAM_NUM_LIMIT • API_USER_CALL_LIMIT • ACL_NUM_LIMIT • APP_THROTTLE_LIMIT • USER_THROTTLE_LIMIT • API_NUM_LIMIT_PER_GROUP • API_POLICY_NUM_LIMIT • API_CONDITION_NUM_LIMIT • SL_DOMAIN_CALL_LIMIT • ELB_SWITCH • AUTHORIZER_NUM_LIMIT • AUTHORIZER_IDENTITY_NUM_LIMIT • APP_CODE_NUM_LIMIT • REGION_MANAGER_WHITELIST_SERVICES • API_SWAGGER_NUM_LIMIT • API_TAG_NUM_LIMIT • LTS_SWITCH • APP_KEY_SECRET_SWITCH • RESPONSE_NUM_LIMIT • CONFIG_NUM_LIMIT_PER_APP • BACKEND_TOKEN_ALLOW_SWITCH • APP_TOKEN_SWITCH • API_DESIGNER_SWITCH • APP_API_KEY_SWITCH • APP_BASIC_SWITCH • APP_JWT_SWITCH

Parameter	Type	Description
		<ul style="list-style-type: none">• APP_ROUTE_SWITCH• PUBLIC_KEY_SWITCH• APP_SECRET_SWITCH• CASCADE_SWITCH• IS_INIT_API_PATH_HASH
config_value	String	Quota value. It indicates the value of the quota for the current gateway.
config_time	String	Time when the quota is created.

Parameter	Type	Description
remark	String	<p>Quota description.</p> <ul style="list-style-type: none"> ● API_NUM_LIMIT: Maximum number of APIs you can create. ● APP_NUM_LIMIT: Maximum number of apps you can create. ● APIGROUP_NUM_LIMIT: Maximum number of API groups you can create. ● ENVIRONMENT_NUM_LIMIT: Maximum number of environments you can create. ● VARIABLE_NUM_LIMIT: Maximum number of environment variables you can create for an API group. ● SIGN_NUM_LIMIT: Maximum number of signature keys you can create. ● THROTTLE_NUM_LIMIT: Maximum number of request throttling policies you can create. ● APIGROUP_DOMAIN_NUM_LIMIT: Maximum number of custom domain names you can bind to an API group. ● API_VERSION_NUM_LIMIT: Maximum number of versions you can retain for an API. ● VPC_NUM_LIMIT: Maximum number of VPC channels you can create. ● VPC_INSTANCE_NUM_LIMIT: Maximum number of cloud servers you can associate with a VPC channel. ● API_PARAM_NUM_LIMIT: Maximum number of parameters you can configure for an API. ● API_USER_CALL_LIMIT: Maximum number of times an API can be called within a specific period. ● ACL_NUM_LIMIT: Maximum number of access control policies you can create. ● APP_THROTTLE_LIMIT: Maximum number of excluded apps allowed for a request throttling policy. ● USER_THROTTLE_LIMIT: Maximum number of excluded tenants allowed for a request throttling policy. ● API_NUM_LIMIT_PER_GROUP: Maximum number of APIs you can create for an API group.

Parameter	Type	Description
		<ul style="list-style-type: none"> ● API_POLICY_NUM_LIMIT: Maximum number of policy backends you can configure for an API. ● API_CONDITION_NUM_LIMIT: Maximum number of conditions you can configure for a policy backend. ● SL_DOMAIN_CALL_LIMIT: Maximum number of requests that can be sent to a subdomain name within a specific period. ● ELB_SWITCH: Whether to enable ELB channels. ● AUTHORIZER_NUM_LIMIT: Maximum number of custom authorizers you can create. ● AUTHORIZER_IDENTITY_NUM_LIMIT: Maximum number of identity sources you can configure for a custom authorizer. ● APP_CODE_NUM_LIMIT: Maximum number of AppCodes you can create for an app. ● REGION_MANAGER_WHITELIST_SERVICES: Whitelist of services that are not verified by the region manager. ● API_SWAGGER_NUM_LIMIT: Maximum number of Swagger files you can bind to an API group. ● API_TAG_NUM_LIMIT: Maximum number of tags you can configure for an API. ● LTS_SWITCH: Whether to enable LTS log reporting. ● APP_KEY_SECRET_SWITCH: Whether to enable AppKey and AppSecret customization. 1: enable; 2: disable. ● RESPONSE_NUM_LIMIT: Maximum number of responses you can create for an API group. ● CONFIG_NUM_LIMIT_PER_APP: Maximum number of configuration items you can set for an app. ● BACKEND_TOKEN_ALLOW_SWITCH: Whether to allow tenants to transparently transmit tokens to the backend. 1: allow; 2: disallow. ● APP_TOKEN_SWITCH: Whether to enable AppTokens. ● API_DESIGNER_SWITCH: Whether to enable the API designer. 1: enable; 2: disable.

Parameter	Type	Description
		<ul style="list-style-type: none"> • APP_API_KEY_SWITCH: Whether to enable APP_API_KEY authentication. • APP_BASIC_SWITCH: Whether to enable APP_BASIC authentication. • APP_JWT_SWITCH: Whether to enable APP_JWT authentication. • APP_ROUTE_SWITCH: Whether to enable app routes. • PUBLIC_KEY_SWITCH: Whether to enable PUBLIC_KEY backend authentication. • APP_SECRET_SWITCH: Whether to enable APP_SECRET authentication. • CASCADE_SWITCH: Whether to enable cascaded gateways. • IS_INIT_API_PATH_HASH: Whether API path hashing has been performed.
used	Long	Used quota of the gateway.

Status code: 400

Table 3-1179 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-1180 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1181 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1182 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1183 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total": 43,
  "size": 2,
  "configs": [ {
    "config_id": "9",
    "config_name": "API_VERSION_NUM_LIMIT",
    "config_value": "10",
    "config_time": "2019-02-12T19:42:19.914989Z",
    "remark": "xxx",
    "used": 0
  }, {
    "config_id": "8",
    "config_name": "APIGROUP_DOMAIN_NUM_LIMIT",
    "config_value": "5",
    "config_time": "2019-02-12T19:42:19.914989Z",
    "remark": "xxx",
```

```

    "used" : 0
  } ]
}

```

Status code: 400

Bad Request

```

{
  "error_code" : "APIG.2012",
  "error_msg" : "Invalid parameter value,parameterName:instance_id. Please refer to the support documentation"
}

```

Status code: 401

Unauthorized

```

{
  "error_code" : "APIG.1002",
  "error_msg" : "Incorrect token or token resolution failed"
}

```

Status code: 403

Forbidden

```

{
  "error_code" : "APIG.1005",
  "error_msg" : "No permissions to request this method"
}

```

Status code: 404

Not Found

```

{
  "error_code" : "APIG.3030",
  "error_msg" : "The instance does not exist;id:eddc4d25480b4cd6b512f270a1b8b341"
}

```

Status code: 500

Internal Server Error

```

{
  "error_code" : "APIG.9999",
  "error_msg" : "System error"
}

```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found

Status Code	Description
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.23.2 Querying Gateway Configurations

Function

This API is used to query the gateway configurations.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instance/configs

Table 3-1184 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .

Table 3-1185 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20

Request Parameters

Table 3-1186 Request header parameters

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

Response Parameters

Status code: 200

Table 3-1187 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
configs	Array of InstanceConfig objects	Quota list.

Table 3-1188 InstanceConfig

Parameter	Type	Description
config_id	String	Quota ID.

Parameter	Type	Description
config_name	String	Quota name. Enumeration values: <ul style="list-style-type: none">• INSTANCE_NUM_LIMIT
config_value	String	Quota value. It indicates the value of the quota for the current gateway.
config_time	String	Time when the quota is created.
remark	String	Quota description. <ul style="list-style-type: none">• INSTANCE_NUM_LIMIT: Maximum number of gateways that you can create.

Status code: 400**Table 3-1189** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401**Table 3-1190** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403**Table 3-1191** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500**Table 3-1192** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses**Status code: 200**

OK

```
{
  "total": 1,
  "size": 1,
  "configs": [ {
    "config_id": "1",
    "config_name": "INSTANCE_NUM_LIMIT",
    "config_value": "5",
    "config_time": 1597981093255,
    "remark": "xxx"
  } ]
}
```

Status code: 400

Bad Request

```
{
  "error_code": "APIG.2012",
  "error_msg": "Invalid parameter value,parameterName:instance_id. Please refer to the support documentation"
}
```

Status code: 401

Unauthorized

```
{
  "error_code": "APIC.7102",
  "error_msg": "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code": "APIC.7106",
  "error_msg": "No permissions to request for the method"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIC.9000",
  "error_msg" : "Failed to request internal service"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.24 Gateway Management

3.24.1 Creating a Dedicated Gateway (Pay-Per-Use)

Function

This API is used to create a pay-per-use dedicated gateway.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances

Table 3-1193 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .

Request Parameters

Table 3-1194 Request header parameters

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

Table 3-1195 Request body parameters

Parameter	Mandatory	Type	Description
description	No	String	Gateway description. The value can contain up to 255 characters except > and <.
maintain_begin	No	String	Start time of the maintenance time window. It must be in the format "xx:00:00". The value of xx can be 02, 06, 10, 14, 18, or 22. During the maintenance time period, O&M personnel perform maintenance on the gateway. During this period, services can still be used, but occasionally there may be temporary interruptions. Scheduled maintenance occurs infrequently (typically once every several months).
maintain_end	No	String	End time of the maintenance time window. It must be in the format "xx:00:00". There is a 4-hour difference between the start time and end time. During the maintenance time period, O&M personnel perform maintenance on the gateway. During this period, services can still be used, but occasionally there may be temporary interruptions. Scheduled maintenance occurs infrequently (typically once every several months).

Parameter	Mandatory	Type	Description
instance_name	Yes	String	Gateway name. Enter 3 to 64 characters, starting with a letter. Only letters, digits, hyphens (-), and underscores (_) are allowed. Minimum: 3 Maximum: 64
instance_id	No	String	Gateway ID, which will be automatically generated if you do not specify this parameter.
spec_id	Yes	String	Gateway edition. Options: <ul style="list-style-type: none"> • BASIC • PROFESSIONAL • ENTERPRISE • PLATINUM • BASIC_IPV6 • PROFESSIONAL_IPV6 • ENTERPRISE_IPV6 • PLATINUM_IPV6 Enumeration values: <ul style="list-style-type: none"> • BASIC • PROFESSIONAL • ENTERPRISE • PLATINUM • BASIC_IPV6 • PROFESSIONAL_IPV6 • ENTERPRISE_IPV6 • PLATINUM_IPV6
vpc_id	Yes	String	VPC ID. You can obtain it in either of the following ways: <ul style="list-style-type: none"> • Method 1: Log in to the VPC console, and click the name of a VPC to view the VPC ID on the displayed details page. • Method 2: Call the corresponding VPC API. For details, see section "Querying VPCs" in the VPC API Reference.

Parameter	Mandatory	Type	Description
subnet_id	Yes	String	<p>Subnet network ID.</p> <p>You can obtain it in either of the following ways:</p> <ul style="list-style-type: none"> • Method 1: Log in to the VPC console and click the target subnet on the Subnets page. You can view the network ID on the displayed page. • Method 2: Call the corresponding VPC API. For details, see section "Querying Subnets" in the VPC API Reference.
security_group_id	Yes	String	<p>ID of the security group to which the gateway belongs.</p> <p>You can obtain it in either of the following ways:</p> <ul style="list-style-type: none"> • Method 1: Log in to the VPC console. Choose Access Control > Security Groups in the navigation pane. On the Security Groups page, click the target security group. Then view the security group ID on the displayed page. • Method 2: Call the corresponding VPC API. For details, see section "Querying Security Groups" in the VPC API Reference.

Parameter	Mandatory	Type	Description
eip_id	No	String	<p>EIP ID.</p> <p>This parameter is required if public access is enabled for the gateway and loadbalancer_provider is set to lvs. After you bind an EIP to the gateway, users can access APIs in the gateway from public networks using the EIP.</p> <p>To obtain an EIP ID, log in to the VPC console, and choose "Elastic IP and Bandwidth" > "EIPs" in the navigation pane. Click the name of the target EIP, and view the EIP ID on the displayed page.</p>
enterprise_project_id	No	String	<p>Enterprise project ID. This parameter is required for an enterprise account.</p> <p>You can obtain it in either of the following ways:</p> <ul style="list-style-type: none"> • Method 1: Log in to the Enterprise Project Management page, click the name of the target enterprise project, and view the project ID on the displayed page. • Method 2: Call the corresponding project management API. For details, see section "Querying the Enterprise Project List" in the Enterprise Management API Reference.

Parameter	Mandatory	Type	Description
available_zone_ids	Yes	Array of strings	<p>AZs.</p> <p>An AZ is a physical region where resources use independent power supply and networks. AZs are physically isolated but interconnected through an internal network. To enhance application availability, create gateways in different AZs.</p> <p>To obtain AZ information, call the API used to query AZs.</p>
bandwidth_size	No	Integer	<p>Outbound access bandwidth.</p> <p>This parameter is required if public outbound access is enabled for the gateway. After you configure the bandwidth for the gateway, users can access resources on public networks.</p> <p>Default: 5</p>
bandwidth_charging_mode	No	String	<p>Billing type of the public outbound access bandwidth. This parameter is required if public outbound access is enabled for the gateway.</p> <ul style="list-style-type: none"> • bandwidth: billed by bandwidth • traffic: billed by traffic <p>Default: bandwidth</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • bandwidth • traffic
ipv6_enable	No	Boolean	<p>Indicates whether public access with an IPv6 address is supported.</p> <p>Currently, IPv6 addresses are supported only in certain regions.</p>

Parameter	Mandatory	Type	Description
loadbalancer_provider	No	String	Type of the load balancer used by the gateway. <ul style="list-style-type: none"> • LVS • ELB (available only in certain regions) Default: lvs Enumeration values: <ul style="list-style-type: none"> • lvs • elb
tags	No	Array of TmsKeyValue objects	Tags. A maximum of 20 tags can be created for a gateway. Array Length: 0 - 20
vpcep_service_name	No	String	Name of a VPC endpoint service. It can contain max. 16 characters, including letters, digits, hyphens (-), and underscores. If this parameter is not specified, the system automatically generates a name in the "{region}.apig.{service_id}" format. If this parameter is specified, the system automatically generates a name in the "{region}. {vpcep_service_name}. {service_id}" format. After the gateway is created, you can modify this name on the Gateways > VPC Endpoints page.

Parameter	Mandatory	Type	Description
ingress_bandwidth_size	No	Integer	Public inbound access bandwidth. This parameter is required if public inbound access is enabled for the gateway and loadbalancer_provider is set to elb. After you bind an EIP to the gateway, users can access APIs in the gateway from public networks using the EIP. Default: 5
ingress_bandwidth_charging_mode	No	String	Billing type of the public inbound access bandwidth. This parameter is required if public inbound access is enabled for the gateway and loadbalancer_provider is set to elb. <ul style="list-style-type: none"> bandwidth: billed by bandwidth traffic: billed by traffic Default: bandwidth Enumeration values: <ul style="list-style-type: none"> bandwidth traffic

Table 3-1196 TmsKeyValue

Parameter	Mandatory	Type	Description
key	No	String	Key. Include UTF-8 letters, digits, spaces, or special characters (._:=-@). Do not start with _sys_ because it is a system label. Minimum: 1 Maximum: 128

Parameter	Mandatory	Type	Description
value	No	String	Value. You can enter letters, digits, and spaces or other special characters (_.:/=+-@) in UTF-8 format. Minimum: 0 Maximum: 255

Response Parameters

Status code: 202

Table 3-1197 Response body parameters

Parameter	Type	Description
instance_id	String	Gateway ID.
message	String	Information about the gateway creation task.
job_id	String	Task ID.

Status code: 400

Table 3-1198 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-1199 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1200 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1201 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1202 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Creating a gateway with network and security group configurations

```
{
  "available_zone_ids": [ "xx-xxx-7b", "xx-xxx-7a" ],
  "bandwidth_size": 5,
  "description": "test create instance",
  "eip_id": "41f961ab-2bdd-4ca7-9b59-cfc4fce10c9",
  "enterprise_project_id": "0",
  "instance_name": "apig-demo",
  "maintain_begin": "22:00:00",
  "maintain_end": "02:00:00",
  "security_group_id": "36d0ec18-bd10-4da7-86f3-ad7a5ddc55d7",
  "spec_id": "PROFESSIONAL",
  "subnet_id": "a938121c-11c4-4c91-b983-bc9acd347bb5",
  "vpc_id": "0957108c-257c-4ce0-9e93-527d279ce763"
}
```

Example Responses

Status code: 202

Accepted

```
{
  "instance_id": "6a7d71827fd54572b1f31aa9548fcc81",
}
```

```
"message" : "JOB_ASSIGNED_FOR_PROVISIONING_0003:The job JOB-
bdb370eb6f4c4c73b61b95a9da38beb5 has been assigned to the instance
6a7d71827fd54572b1f31aa9548fcc81 for running provisioning.",
"job_id" : "JOB-edbac2355fb7433e98f173ea2e452e2d"
}
```

Status code: 400

Bad Request

```
{
"error_code" : "APIC.7211",
"error_msg" : "Parameter value does not match the rules, parameter name[maintainBegin]"
}
```

Status code: 401

Unauthorized

```
{
"error_code" : "APIC.7102",
"error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
"error_code" : "APIC.7106",
"error_msg" : "No permissions to request for the method"
}
```

Status code: 404

Not Found

```
{
"error_code" : "APIC.7301",
"error_msg" : "Instance spec not found"
}
```

Status code: 500

Internal Server Error

```
{
"error_code" : "APIC.9000",
"error_msg" : "Failed to request internal service"
}
```

Status Codes

Status Code	Description
202	Accepted
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found

Status Code	Description
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.24.2 Querying Dedicated Gateway Details

Function

This API is used to query the details of a dedicated gateway.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}

Table 3-1203 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-1204 Request header parameters

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

Response Parameters

Status code: 200

Table 3-1205 Response body parameters

Parameter	Type	Description
id	String	Gateway ID.
project_id	String	ID of the tenant to which the gateway belongs.
instance_name	String	Gateway name.

Parameter	Type	Description
status	String	<p>Instance status:</p> <ul style="list-style-type: none"> ● Creating: The instance is being created. ● CreateSuccess: The instance is created successfully. ● CreateFail: The instance fails to be created. ● Initing: The instance is being initialized. ● Registering: The instance is being registered. ● Running: The instance is running. ● InitingFailed: The instance fails to be initialized. ● RegisterFailed: The instance fails to be registered. ● Installing: The instance is being installed. ● InstallFailed: The instance fails to be installed. ● Updating: The instance is being upgraded. ● UpdateFailed: The instance fails to be upgraded. ● Rollbacking: The instance is being rolled back. ● RollbackSuccess: The instance is rolled back successfully. ● RollbackFailed: The instance fails to be rolled back. ● Deleting: The instance is being deleted. ● DeleteFailed: The instance fails to be deleted. ● Unregistering: The instance is being deregistered. ● UnRegisterFailed: The instance fails to be deregistered. ● CreateTimeout: Creation of the instance times out. ● InitTimeout: Initialization of the instance times out. ● RegisterTimeout: Registration of the instance times out. ● InstallTimeout: Installation of the instance times out. ● UpdateTimeout: Upgrading of the instance times out. ● RollbackTimeout: Rollback of the instance times out.

Parameter	Type	Description
		<ul style="list-style-type: none"> ● DeleteTimeout: Deletion of the instance times out. ● UnregisterTimeout: Deregistration of the instance times out. ● Starting: The instance is being started. ● Freezing: The instance is being frozen. ● Frozen: The instance is frozen. ● Restarting: The instance is being restarted. ● RestartFail: The instance fails to be restarted. ● Unhealthy: The instance is abnormal. ● RestartTimeout: Restart of the instance times out. ● Resizing: The instance specification is changing. ● ResizeFailed: The instance specification fails to be changed. ● ResizeTimeout: The instance specification change times out. <p>Enumeration values:</p> <ul style="list-style-type: none"> ● Creating ● CreateSuccess ● CreateFail ● Initing ● Registering ● Running ● InitingFailed ● RegisterFailed ● Installing ● InstallFailed ● Updating ● UpdateFailed ● Rollbacking ● RollbackSuccess ● RollbackFailed ● Deleting ● DeleteFailed ● Unregistering ● UnRegisterFailed ● CreateTimeout

Parameter	Type	Description
		<ul style="list-style-type: none">• InitTimeout• RegisterTimeout• InstallTimeout• UpdateTimeout• RollbackTimeout• DeleteTimeout• UnregisterTimeout• Starting• Freezing• Frozen• Restarting• RestartFail• Unhealthy• RestartTimeout• Resizing• ResizeFailed• ResizeTimeout

Parameter	Type	Description
instance_statuses	Integer	Instance status ID: <ul style="list-style-type: none"> ● 1: Creating ● 2: Created successfully ● 3: Creation failed ● 4: Initializing ● 5: Registering ● 6: Running ● 7: Initialization failed ● 8: Registration failed ● 10: Installing ● 11: Installation failed ● 12: Upgrading ● 13: Upgrade failed ● 20: Rolling back ● 21: Rolled back ● 22: Rollback failed ● 23: Deleting ● 24: Deletion failed ● 25: Deregistering ● 26: Deregistration failed ● 27: Creation timed out ● 28: Initialization timed out ● 29: Registration timed out ● 30: Installation timed out ● 31: Upgrade timed out ● 32: Rollback timed out ● 33: Deletion timed out ● 34: Deregistration timed out ● 35: Starting ● 36: Freezing ● 37: Frozen ● 38: Restarting ● 39: Restart failed ● 40: Abnormal ● 41: Restart timed out ● 42: Changing specification ● 43: Specification change failed ● 44: Specification change timed out

Parameter	Type	Description
		<p>Enumeration values:</p> <ul style="list-style-type: none">• 1• 2• 3• 4• 5• 6• 7• 8• 10• 11• 12• 13• 20• 21• 22• 23• 24• 25• 26• 27• 28• 29• 30• 31• 32• 33• 34• 35• 36• 37• 38• 39• 40• 41• 42• 43• 44

Parameter	Type	Description
type	String	Gateway type. The default value is apig.
spec	String	Gateway edition. <ul style="list-style-type: none"> • BASIC • PROFESSIONAL • ENTERPRISE • PLATINUM • BASIC_IPV6 • PROFESSIONAL_IPV6 • ENTERPRISE_IPV6 • PLATINUM_IPV6 Enumeration values: <ul style="list-style-type: none"> • BASIC • PROFESSIONAL • ENTERPRISE • PLATINUM • BASIC_IPV6 • PROFESSIONAL_IPV6 • ENTERPRISE_IPV6 • PLATINUM_IPV6
create_time	Long	Time when the gateway is created. The time is in the Unix timestamp format.
enterprise_project_id	String	Enterprise project ID. This parameter is required for an enterprise account.
eip_address	String	EIP bound to the gateway.
charging_mode	Integer	Billing mode of the gateway. <ul style="list-style-type: none"> • 0: pay-per-use • 1: This parameter is not used currently. Enumeration values: <ul style="list-style-type: none"> • 0 • 1
cbc_metadata	String	This parameter is not used currently.

Parameter	Type	Description
loadbalancer_provider	String	Type of the load balancer used by the gateway. <ul style="list-style-type: none"> • LVS • ELB (available only in certain regions) Default: lvs Enumeration values: <ul style="list-style-type: none"> • lvs • elb
cbc_operation_locks	Array of CbcOperationLock objects	Cloud operations restriction lock
description	String	Description about the gateway.
vpc_id	String	VPC ID. You can obtain it in either of the following ways: <ul style="list-style-type: none"> • Method 1: Log in to the VPC console, and click the name of a VPC to view the VPC ID on the displayed details page. • Method 2: Call the corresponding VPC API. For details, see section "Querying VPCs" in the VPC API Reference.
subnet_id	String	Subnet network ID. You can obtain it in either of the following ways: <ul style="list-style-type: none"> • Method 1: Log in to the VPC console and click the target subnet on the Subnets page. You can view the network ID on the displayed page. • Method 2: Call the corresponding VPC API. For details, see section "Querying Subnets" in the VPC API Reference.

Parameter	Type	Description
security_group_id	String	ID of the security group to which the gateway belongs. You can obtain it in either of the following ways: <ul style="list-style-type: none">• Method 1: Log in to the VPC console. Choose Access Control > Security Groups in the navigation pane. On the Security Groups page, click the target security group. Then view the security group ID on the displayed page.• Method 2: Call the corresponding VPC API. For details, see section "Querying Security Groups" in the VPC API Reference.
maintain_begin	String	Start time of the maintenance time window. It must be in the format "xx:00:00". The value of xx can be 02, 06, 10, 14, 18, or 22. During the maintenance time period, the O&M personnel can perform maintenance operations on the gateway. During maintenance, services can still be used, but occasionally there may be temporary service interruptions. Scheduled maintenance occurs infrequently (typically once every several months).
maintain_end	String	End time of the maintenance time window. It must be in the format "xx:00:00". There is a 4-hour difference between the start time and end time. During the maintenance time period, the O&M personnel can perform maintenance operations on the gateway. During maintenance, services can still be used, but occasionally there may be temporary service interruptions. Scheduled maintenance occurs infrequently (typically once every several months).
ingress_ip	String	VPC ingress address.
ingress_ip_v6	String	VPC access address (IPv6).
user_id	String	ID of the account to which the gateway belongs.
nat_eip_ipv6_cidr	String	Public egress address (IPv6). Currently, IPv6 addresses are supported only in certain regions.

Parameter	Type	Description
eip_ipv6_address	String	EIP (IPv6). Currently, IPv6 addresses are supported only in certain regions.
nat_eip_address	String	IP address for public outbound access.
bandwidth_size	Integer	Outbound access bandwidth.
bandwidth_charging_mode	String	Billing mode of the public outbound access bandwidth.
available_zone_ids	String	AZ.
instance_version	String	Gateway version.
virsubnet_id	String	Subnet network ID. Currently, this parameter is not supported.
roma_eip_address	String	ROMA EIP. Currently, this parameter is not supported.
listeners	Object	Listener information. Currently, this parameter is not supported.
supported_features	Array of strings	Supported features.
endpoint_service	EndpointService object	VPC endpoint service details. This parameter will be deprecated. Use endpoint_services instead.
endpoint_services	Array of EndpointService objects	VPC endpoint services.
node_ips	NodeIps object	VPC endpoint ID.
publicips	Array of IpDetails objects	Public inbound access addresses.
privateips	Array of IpDetails objects	Private inbound access addresses.
is_releasable	Boolean	Whether the gateway can be released. <ul style="list-style-type: none"> • true: The gateway can be released. • false: The gateway cannot be released.

Parameter	Type	Description
ingress_bandwidth_charging_mode	String	Billing mode of the public inbound access bandwidth.

Table 3-1206 CbcOperationLock

Parameter	Type	Description
lock_scene	String	Restriction scenarios: <ul style="list-style-type: none"> • TO_PERIOD_LOCK: Changing the billing mode from pay-per-use to yearly/monthly. In this scenario, deleting resources, changing specifications, and changing from pay-per-use to yearly/monthly are not allowed. • SPEC_CHG_LOCK: Changing specifications of the yearly/monthly billing mode. In this scenario, deleting resources and changing specifications are not allowed. Enumeration values: <ul style="list-style-type: none"> • TO_PERIOD_LOCK • PEC_CHG_LOCK
lock_source_id	String	ID of the object that initiates the restriction

Table 3-1207 EndpointService

Parameter	Type	Description
service_name	String	VPC endpoint service name.
created_at	String	Creation time.

Table 3-1208 Nodelps

Parameter	Type	Description
livedata	Array of strings	LiveData node IP addresses.
shubao	Array of strings	Shubao node IP addresses.

Table 3-1209 IpDetails

Parameter	Type	Description
ip_address	String	IP address.
bandwidth_size	Integer	Bandwidth.

Status code: 401

Table 3-1210 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1211 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1212 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1213 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "id": "8dfxxxxxxxxxxxxxxxxxxxxxxxx00p",
  "spec": "BASIC",
  "project_id": "78xxxxxxxxxxxxxxxxxxxxxxxxoi",
  "instance_name": "apig-demo",
  "status": "Running",
  "instance_status": 6,
  "eip_address": null,
  "type": null,
  "create_time": 1635890506328,
  "charging_mode": 0,
  "enterprise_project_id": "0",
  "loadbalancer_provider": "elb",
  "description": "test create instance",
  "instance_version": "acc6d368a3cb4d47840380bf62b0ab32",
  "available_zone_ids": "[xx-xxx-7a, xx-xxx-7b]",
  "user_id": "e966ff7227ef4df49df7d57aaf00f8ed",
  "vpc_id": "0402ea19-5457-4032-9d1b-eb48b98f6c66",
  "subnet_id": "a3bd29e4-d5bc-414c-a79a-1f35ee4ead88",
  "virsubnet_id": "a3bd29e4-d5bc-414c-a79a-1f35ee4ead88",
  "security_group_id": "4b95a790-5cfc-463d-8de5-42199e55371c",
  "maintain_begin": "22:00:00",
  "maintain_end": "02:00:00",
  "ingress_ip": "192.168.0.152",
  "ingress_ip_v6": null,
  "nat_eip_address": "xxx.xxx.xxx.xxx",
  "roma_eip_address": null,
  "bandwidth_size": 5,
  "bandwidth_charging_mode": "traffic",
  "nat_eip_ipv6_cidr": null,
  "eip_ipv6_address": null,
  "supported_features": [ "lts", "gateway_responses", "ratelimit", "request_body_size", "backend_timeout",
    "app_token", "app_basic", "app_secret", "multi_auth", "route", "sign_basic", "app_route",
    "backend_client_certificate", "ssl_ciphers", "cors", "app_quota", "app_acl", "real_ip_from_xff",
    "set_resp_headers", "vpc_backup", "throttle_strategy", "watch_instance", "sign_aes",
    "mock_status_code_and_header", "backend_retry_count", "custom_log", "real_ip_header_getter",
    "policy_sys_param", "vpc_name_modifiable", "breaker", "default_group_host_trustlist" ],
  "node_ips": {
    "livedata": [ ],
    "shubao": [ "192.168.0.123", "192.168.0.114" ]
  },
  "endpoint_service": null,
  "endpoint_services": [ {
    "service_name": "xx-xxx-7a.apig.20bc4a91-1542-43s2-a278-b1e49c0hh6f9",
    "created_at": "2021-8-03 06:04:43"
  } ],
  "publicips": [ {
    "ip_address": "xxx.xxx.xxx.xxx",
    "bandwidth_size": 5
  } ],
}
```

```
"privateips" : [ {
  "ip_address" : "xxx.xxx.xxx.xxx",
  "bandwidth_size" : 5
} ],
"ingress_bandwidth_charging_mode" : "traffic",
"cbc_operation_locks" : [ {
  "lock_scene" : "TO_PERIOD_LOCK",
  "lock_source_id" : "CxxxxxxxxxM"
} ]
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIC.7102",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIC.7106",
  "error_msg" : "No permissions to request for the method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIC.7302",
  "error_msg" : "Instance not found"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIC.9000",
  "error_msg" : "Failed to request internal service"
}
```

Status Codes

Status Code	Description
200	OK
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.24.3 Updating a Dedicated Gateway

Function

This API is used to update a dedicated gateway.

Calling Method

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

URI

PUT /v2/{project_id}/apigw/instances/{instance_id}

Table 3-1214 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-1215 Request header parameters

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

Table 3-1216 Request body parameters

Parameter	Mandatory	Type	Description
description	No	String	Gateway description. The value can contain up to 255 characters except > and <.
maintain_begin	No	String	<p>Start time of the maintenance time window. It must be in the format "xx:00:00". The value of xx can be 02, 06, 10, 14, 18, or 22.</p> <p>During the maintenance time period, O&M personnel perform maintenance on the gateway. During this period, services can still be used, but occasionally there may be temporary interruptions. Scheduled maintenance occurs infrequently (typically once every several months).</p>
maintain_end	No	String	<p>End time of the maintenance time window. It must be in the format "xx:00:00". There is a 4-hour difference between the start time and end time.</p> <p>During the maintenance time period, O&M personnel perform maintenance on the gateway. During this period, services can still be used, but occasionally there may be temporary interruptions. Scheduled maintenance occurs infrequently (typically once every several months).</p>
instance_name	No	String	<p>Gateway name.</p> <p>Enter 3 to 64 characters, starting with a letter. Only letters, digits, hyphens (-), and underscores (_) are allowed.</p> <p>Minimum: 3 Maximum: 64</p>

Parameter	Mandatory	Type	Description
security_group_id	No	String	<p>Security group to which the gateway belongs.</p> <p>You can obtain it in either of the following ways:</p> <ul style="list-style-type: none"> • Method 1: Log in to the VPC console. Choose Access Control > Security Groups in the navigation pane. On the Security Groups page, click the target security group. Then view the security group ID on the displayed page. • Method 2: Call the corresponding VPC API. For details, see section "Querying Security Groups" in the VPC API Reference.
vpcep_service_name	No	String	<p>Name of a VPC endpoint service.</p> <p>It can contain max. 16 characters, including letters, digits, hyphens (-), and underscores.</p> <p>If this parameter is not specified, the system automatically generates a name in the "{region}. {service_id}" format.</p> <p>If this parameter is specified, the system automatically generates a name in the "{region}. {vpcep_service_name}. {service_id}" format.</p>

Response Parameters

Status code: 200

Table 3-1217 Response body parameters

Parameter	Type	Description
id	String	Gateway ID.

Parameter	Type	Description
project_id	String	ID of the tenant to which the gateway belongs.
instance_name	String	Gateway name.

Parameter	Type	Description
status	String	<p>Instance status:</p> <ul style="list-style-type: none"> ● Creating: The instance is being created. ● CreateSuccess: The instance is created successfully. ● CreateFail: The instance fails to be created. ● Initing: The instance is being initialized. ● Registering: The instance is being registered. ● Running: The instance is running. ● InitingFailed: The instance fails to be initialized. ● RegisterFailed: The instance fails to be registered. ● Installing: The instance is being installed. ● InstallFailed: The instance fails to be installed. ● Updating: The instance is being upgraded. ● UpdateFailed: The instance fails to be upgraded. ● Rollbacking: The instance is being rolled back. ● RollbackSuccess: The instance is rolled back successfully. ● RollbackFailed: The instance fails to be rolled back. ● Deleting: The instance is being deleted. ● DeleteFailed: The instance fails to be deleted. ● Unregistering: The instance is being deregistered. ● UnRegisterFailed: The instance fails to be deregistered. ● CreateTimeout: Creation of the instance times out. ● InitTimeout: Initialization of the instance times out. ● RegisterTimeout: Registration of the instance times out. ● InstallTimeout: Installation of the instance times out. ● UpdateTimeout: Upgrading of the instance times out. ● RollbackTimeout: Rollback of the instance times out.

Parameter	Type	Description
		<ul style="list-style-type: none"> ● DeleteTimeout: Deletion of the instance times out. ● UnregisterTimeout: Deregistration of the instance times out. ● Starting: The instance is being started. ● Freezing: The instance is being frozen. ● Frozen: The instance is frozen. ● Restarting: The instance is being restarted. ● RestartFail: The instance fails to be restarted. ● Unhealthy: The instance is abnormal. ● RestartTimeout: Restart of the instance times out. ● Resizing: The instance specification is changing. ● ResizeFailed: The instance specification fails to be changed. ● ResizeTimeout: The instance specification change times out. <p>Enumeration values:</p> <ul style="list-style-type: none"> ● Creating ● CreateSuccess ● CreateFail ● Initing ● Registering ● Running ● InitingFailed ● RegisterFailed ● Installing ● InstallFailed ● Updating ● UpdateFailed ● Rollbacking ● RollbackSuccess ● RollbackFailed ● Deleting ● DeleteFailed ● Unregistering ● UnRegisterFailed ● CreateTimeout

Parameter	Type	Description
		<ul style="list-style-type: none">• InitTimeout• RegisterTimeout• InstallTimeout• UpdateTimeout• RollbackTimeout• DeleteTimeout• UnregisterTimeout• Starting• Freezing• Frozen• Restarting• RestartFail• Unhealthy• RestartTimeout• Resizing• ResizeFailed• ResizeTimeout

Parameter	Type	Description
instance_statuses	Integer	<p>Instance status ID:</p> <ul style="list-style-type: none"> ● 1: Creating ● 2: Created successfully ● 3: Creation failed ● 4: Initializing ● 5: Registering ● 6: Running ● 7: Initialization failed ● 8: Registration failed ● 10: Installing ● 11: Installation failed ● 12: Upgrading ● 13: Upgrade failed ● 20: Rolling back ● 21: Rolled back ● 22: Rollback failed ● 23: Deleting ● 24: Deletion failed ● 25: Deregistering ● 26: Deregistration failed ● 27: Creation timed out ● 28: Initialization timed out ● 29: Registration timed out ● 30: Installation timed out ● 31: Upgrade timed out ● 32: Rollback timed out ● 33: Deletion timed out ● 34: Deregistration timed out ● 35: Starting ● 36: Freezing ● 37: Frozen ● 38: Restarting ● 39: Restart failed ● 40: Abnormal ● 41: Restart timed out ● 42: Changing specification ● 43: Specification change failed ● 44: Specification change timed out

Parameter	Type	Description
		<p>Enumeration values:</p> <ul style="list-style-type: none">• 1• 2• 3• 4• 5• 6• 7• 8• 10• 11• 12• 13• 20• 21• 22• 23• 24• 25• 26• 27• 28• 29• 30• 31• 32• 33• 34• 35• 36• 37• 38• 39• 40• 41• 42• 43• 44

Parameter	Type	Description
type	String	Gateway type. The default value is apig.
spec	String	Gateway edition. <ul style="list-style-type: none"> • BASIC • PROFESSIONAL • ENTERPRISE • PLATINUM • BASIC_IPV6 • PROFESSIONAL_IPV6 • ENTERPRISE_IPV6 • PLATINUM_IPV6 Enumeration values: <ul style="list-style-type: none"> • BASIC • PROFESSIONAL • ENTERPRISE • PLATINUM • BASIC_IPV6 • PROFESSIONAL_IPV6 • ENTERPRISE_IPV6 • PLATINUM_IPV6
create_time	Long	Time when the gateway is created. The time is in the Unix timestamp format.
enterprise_project_id	String	Enterprise project ID. This parameter is required for an enterprise account.
eip_address	String	EIP bound to the gateway.
charging_mode	Integer	Billing mode of the gateway. <ul style="list-style-type: none"> • 0: pay-per-use • 1: This parameter is not used currently. Enumeration values: <ul style="list-style-type: none"> • 0 • 1
cbc_metadata	String	This parameter is not used currently.

Parameter	Type	Description
loadbalancer_provider	String	Type of the load balancer used by the gateway. <ul style="list-style-type: none"> • LVS • ELB (available only in certain regions) Default: lvs Enumeration values: <ul style="list-style-type: none"> • lvs • elb
cbc_operation_locks	Array of CbcOperationLock objects	Cloud operations restriction lock
description	String	Description about the gateway.
vpc_id	String	VPC ID. You can obtain it in either of the following ways: <ul style="list-style-type: none"> • Method 1: Log in to the VPC console, and click the name of a VPC to view the VPC ID on the displayed details page. • Method 2: Call the corresponding VPC API. For details, see section "Querying VPCs" in the VPC API Reference.
subnet_id	String	Subnet network ID. You can obtain it in either of the following ways: <ul style="list-style-type: none"> • Method 1: Log in to the VPC console and click the target subnet on the Subnets page. You can view the network ID on the displayed page. • Method 2: Call the corresponding VPC API. For details, see section "Querying Subnets" in the VPC API Reference.

Parameter	Type	Description
security_group_id	String	ID of the security group to which the gateway belongs. You can obtain it in either of the following ways: <ul style="list-style-type: none">• Method 1: Log in to the VPC console. Choose Access Control > Security Groups in the navigation pane. On the Security Groups page, click the target security group. Then view the security group ID on the displayed page.• Method 2: Call the corresponding VPC API. For details, see section "Querying Security Groups" in the VPC API Reference.
maintain_begin	String	Start time of the maintenance time window. It must be in the format "xx:00:00". The value of xx can be 02, 06, 10, 14, 18, or 22. During the maintenance time period, the O&M personnel can perform maintenance operations on the gateway. During maintenance, services can still be used, but occasionally there may be temporary service interruptions. Scheduled maintenance occurs infrequently (typically once every several months).
maintain_end	String	End time of the maintenance time window. It must be in the format "xx:00:00". There is a 4-hour difference between the start time and end time. During the maintenance time period, the O&M personnel can perform maintenance operations on the gateway. During maintenance, services can still be used, but occasionally there may be temporary service interruptions. Scheduled maintenance occurs infrequently (typically once every several months).
ingress_ip	String	VPC ingress address.
ingress_ip_v6	String	VPC access address (IPv6).
user_id	String	ID of the account to which the gateway belongs.
nat_eip_ipv6_cidr	String	Public egress address (IPv6). Currently, IPv6 addresses are supported only in certain regions.

Parameter	Type	Description
eip_ipv6_address	String	EIP (IPv6). Currently, IPv6 addresses are supported only in certain regions.
nat_eip_address	String	IP address for public outbound access.
bandwidth_size	Integer	Outbound access bandwidth.
bandwidth_charging_mode	String	Billing mode of the public outbound access bandwidth.
available_zone_ids	String	AZ.
instance_version	String	Gateway version.
virsubnet_id	String	Subnet network ID. Currently, this parameter is not supported.
roma_eip_address	String	ROMA EIP. Currently, this parameter is not supported.
listeners	Object	Listener information. Currently, this parameter is not supported.
supported_features	Array of strings	Supported features.
endpoint_service	EndpointService object	VPC endpoint service details. This parameter will be deprecated. Use endpoint_services instead.
endpoint_services	Array of EndpointService objects	VPC endpoint services.
node_ips	NodeIps object	VPC endpoint ID.
publicips	Array of IpDetails objects	Public inbound access addresses.
privateips	Array of IpDetails objects	Private inbound access addresses.
is_releasable	Boolean	Whether the gateway can be released. <ul style="list-style-type: none"> • true: The gateway can be released. • false: The gateway cannot be released.

Parameter	Type	Description
ingress_bandwidth_charging_mode	String	Billing mode of the public inbound access bandwidth.

Table 3-1218 CbcOperationLock

Parameter	Type	Description
lock_scene	String	Restriction scenarios: <ul style="list-style-type: none"> • TO_PERIOD_LOCK: Changing the billing mode from pay-per-use to yearly/monthly. In this scenario, deleting resources, changing specifications, and changing from pay-per-use to yearly/monthly are not allowed. • SPEC_CHG_LOCK: Changing specifications of the yearly/monthly billing mode. In this scenario, deleting resources and changing specifications are not allowed. Enumeration values: <ul style="list-style-type: none"> • TO_PERIOD_LOCK • PEC_CHG_LOCK
lock_source_id	String	ID of the object that initiates the restriction

Table 3-1219 EndpointService

Parameter	Type	Description
service_name	String	VPC endpoint service name.
created_at	String	Creation time.

Table 3-1220 Nodelps

Parameter	Type	Description
livedata	Array of strings	LiveData node IP addresses.
shubao	Array of strings	Shubao node IP addresses.

Table 3-1221 IpDetails

Parameter	Type	Description
ip_address	String	IP address.
bandwidth_size	Integer	Bandwidth.

Status code: 400

Table 3-1222 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-1223 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1224 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1225 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Status code: 500

Table 3-1226 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Modifying a gateway

```
{
  "description" : "test create instance",
  "instance_name" : "apig-demo"
}
```

Example Responses

Status code: 200

OK

```
{
  "available_zone_ids" : "[xx-xxx-7a, xx-xxx-7b]",
  "bandwidth_size" : 5,
  "description" : "test create instance",
  "enterprise_project_id" : "0",
  "instance_name" : "apig-demo",
  "maintain_begin" : "22:00:00",
  "maintain_end" : "02:00:00",
  "security_group_id" : "36d0ec18-bd10-4da7-86f3-ad7a5ddc55d7",
  "spec" : "PROFESSIONAL",
  "subnet_id" : "a938121c-11c4-4c91-b983-bc9acd347bb5",
  "vpc_id" : "0957108c-257c-4ce0-9e93-527d279ce763"
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIC.7211",
  "error_msg" : "Parameter value does not match the rules, parameter name[maintainBegin]"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIC.7102",
```

```
{
  "error_msg": "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code": "APIC.7106",
  "error_msg": "No permissions to request for the method"
}
```

Status code: 404

Not Found

```
{
  "error_code": "APIC.7302",
  "error_msg": "Instance not found"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code": "APIC.9000",
  "error_msg": "Failed to request internal service"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.24.4 Querying the Creation Progress of a Dedicated Gateway

Function

This API is used to query the creation progress of a dedicated gateway.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances/{instance_id}/progress

Table 3-1227 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-1228 Request header parameters

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

Response Parameters

Status code: 200

Table 3-1229 Response body parameters

Parameter	Type	Description
progress	Integer	Gateway creation progress. Unit: % Enumeration values: <ul style="list-style-type: none"> • 30 • 50 • 80 • 90 • 100
status	String	Gateway creation status. <ul style="list-style-type: none"> • creating • success • failed Enumeration values: <ul style="list-style-type: none"> • creating • success • failed
error_code	String	Error code.
error_msg	String	Error message.
start_time	Long	Time when the gateway creation starts. The time is in the Unix timestamp format.
end_time	Long	Time when the gateway creation is completed. The time is in the Unix timestamp format.

Status code: 401

Table 3-1230 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1231 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1232 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1233 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

- Gateway created.

```
{
  "end_time" : 1597390224911,
  "error_code" : null,
  "error_msg" : null,
  "progress" : 100,
  "start_time" : 1597389901161,
  "status" : "success"
}
```

- Gateway is being created.

```
{
  "end_time" : 1597390224911,
  "error_code" : null,
  "error_msg" : null,
}
```

```
"progress" : 50,  
"start_time" : 1597389901161,  
"status" : "creating"  
}
```

- Gateway creation failed due to insufficient quota.

```
{  
  "end_time" : 1597390224911,  
  "error_code" : "APIC.9218",  
  "error_msg" : "create failed...",  
  "progress" : 0,  
  "start_time" : 1597389901161,  
  "status" : "failed"  
}
```

- Gateway creation failed due to insufficient resources.

```
{  
  "end_time" : 1597390224911,  
  "error_code" : "APIC.9219",  
  "error_msg" : "create failed...",  
  "progress" : 0,  
  "start_time" : 1597389901161,  
  "status" : "failed"  
}
```

- Gateway creation failed due to other reasons.

```
{  
  "end_time" : 1597390224911,  
  "error_code" : "APIC.9206",  
  "error_msg" : "create failed...",  
  "progress" : 0,  
  "start_time" : 1597389901161,  
  "status" : "failed"  
}
```

Status code: 401

Unauthorized

```
{  
  "error_code" : "APIC.7102",  
  "error_msg" : "Incorrect token or token resolution failed"  
}
```

Status code: 403

Forbidden

```
{  
  "error_code" : "APIC.7106",  
  "error_msg" : "No permissions to request for the method"  
}
```

Status code: 404

Not Found

```
{  
  "error_code" : "APIC.7302",  
  "error_msg" : "Instance not found"  
}
```

Status code: 500

Internal Server Error

```
{  
  "error_code" : "APIC.9000",  
  "error_msg" : "Failed to request internal service"  
}
```

Status Codes

Status Code	Description
200	OK
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.24.5 Updating or Binding an EIP to a Dedicated Gateway

Function

This API is used to bind an EIP to a dedicated gateway or update the EIP bound to a dedicated gateway.

Calling Method

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

URI

PUT /v2/{project_id}/apigw/instances/{instance_id}/eip

Table 3-1234 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-1235 Request header parameters

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

Table 3-1236 Request body parameters

Parameter	Mandatory	Type	Description
eip_id	No	String	EIP ID.

Response Parameters

Status code: 200

Table 3-1237 Response body parameters

Parameter	Type	Description
eip_id	String	EIP ID.
eip_address	String	EIP.
eip_status	String	EIP status.
eip_ipv6_address	String	EIP (IPv6).

Status code: 400

Table 3-1238 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-1239 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403**Table 3-1240** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404**Table 3-1241** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500**Table 3-1242** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Binding an EIP to a gateway

```
{  
  "eip_id": "85392b45-685c-4f77-b19a-14ad875b8190"  
}
```

Example Responses

Status code: 200

OK

```
{
  "eip_id" : "85392b45-685c-4f77-b19a-14ad875b8190",
  "eip_address" : "xxx.xxx.xxx.xxx",
  "eip_status" : "ACTIVE"
}
```

Status code: 400

Bad Request

```
{
  "error_code" : "APIC.7211",
  "error_msg" : "Parameter value does not match the rules, parameter name[eip_id]"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIC.7102",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIC.7106",
  "error_msg" : "No permissions to request for the method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIC.7302",
  "error_msg" : "Instance not found"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIC.9000",
  "error_msg" : "Failed to request internal service"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden

Status Code	Description
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.24.6 Unbinding the EIP of a Dedicated Gateway

Function

This API is used to unbind the EIP of a dedicated gateway.

Calling Method

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

URI

DELETE /v2/{project_id}/apigw/instances/{instance_id}/eip

Table 3-1243 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-1244 Request header parameters

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

Response Parameters

Status code: 401

Table 3-1245 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1246 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1247 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1248 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 401

Unauthorized

```
{  
  "error_code" : "APIC.7102",  
  "error_msg" : "Incorrect token or token resolution failed"  
}
```

Status code: 403

Forbidden

```
{  
  "error_code" : "APIC.7106",  
  "error_msg" : "No permissions to request for the method"  
}
```

Status code: 404

Not Found

```
{  
  "error_code" : "APIC.7302",  
  "error_msg" : "Instance not found"  
}
```

Status code: 500

Internal Server Error

```
{  
  "error_code" : "APIC.9000",  
  "error_msg" : "Failed to request internal service"  
}
```

Status Codes

Status Code	Description
200	OK
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.24.7 Enabling Public Access for a Dedicated Gateway

Function

This API is used to enable public access for a dedicated gateway.

Calling Method

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

URI

POST /v2/{project_id}/apigw/instances/{instance_id}/nat-eip

Table 3-1249 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-1250 Request header parameters

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

Table 3-1251 Request body parameters

Parameter	Mandatory	Type	Description
bandwidth_size	No	String	Outbound access bandwidth. Unit: Mbit/s

Parameter	Mandatory	Type	Description
bandwidth_charging_mode	No	String	Billing type of the public outbound access bandwidth. <ul style="list-style-type: none"> bandwidth: billed by bandwidth traffic: billed by traffic Default: bandwidth Enumeration values: <ul style="list-style-type: none"> bandwidth traffic

Response Parameters

Status code: 400

Table 3-1252 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-1253 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1254 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1255 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1256 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Enabling public access for a gateway

```
{
  "bandwidth_size" : "5",
  "bandwidth_charging_mode" : "traffic"
}
```

Example Responses

Status code: 400

Bad Request

```
{
  "error_code" : "APIC.9210",
  "error_msg" : "create cloud nat eip failed"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIC.7102",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIC.7106",
  "error_msg" : "No permissions to request for the method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIC.7302",
  "error_msg" : "Instance not found"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIC.9000",
  "error_msg" : "Failed to request internal service"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.24.8 Updating the Outbound Access Bandwidth of a Dedicated Gateway

Function

This API is used to update the outbound access bandwidth of a dedicated gateway.

Calling Method

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

URI

PUT /v2/{project_id}/apigw/instances/{instance_id}/nat-eip

Table 3-1257 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-1258 Request header parameters

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

Table 3-1259 Request body parameters

Parameter	Mandatory	Type	Description
bandwidth_size	No	String	Outbound access bandwidth. Unit: Mbit/s
bandwidth_charging_mode	No	String	Billing type of the public outbound access bandwidth. <ul style="list-style-type: none"> bandwidth: billed by bandwidth traffic: billed by traffic Default: bandwidth Enumeration values: <ul style="list-style-type: none"> bandwidth traffic

Response Parameters

Status code: 400

Table 3-1260 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 401

Table 3-1261 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1262 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1263 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1264 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

Updating the outbound access bandwidth of a gateway

```
{
  "bandwidth_size" : 5,
  "bandwidth_charging_mode" : "traffic"
}
```

Example Responses

Status code: 400

Bad Request

```
{
  "error_code" : "APIC.9211",
  "error_msg" : "update bandwidth size failed"
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIC.7102",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIC.7106",
  "error_msg" : "No permissions to request for the method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIC.7302",
  "error_msg" : "Instance not found"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIC.9000",
  "error_msg" : "Failed to request internal service"
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request

Status Code	Description
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.24.9 Disabling Public Access for a Dedicated Gateway

Function

This API is used to disable public access for a dedicated gateway.

Calling Method

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

URI

DELETE /v2/{project_id}/apigw/instances/{instance_id}/nat-eip

Table 3-1265 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-1266 Request header parameters

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

Response Parameters

Status code: 401

Table 3-1267 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1268 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 404

Table 3-1269 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1270 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 401

Unauthorized

```
{
  "error_code" : "APIC.7102",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIC.7106",
  "error_msg" : "No permissions to request for the method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIC.7302",
  "error_msg" : "Instance not found"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIC.9000",
  "error_msg" : "Failed to request internal service"
}
```

Status Codes

Status Code	Description
204	No Content
401	Unauthorized
403	Forbidden

Status Code	Description
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.24.10 Querying AZs

Function

This API is used to query AZs where you can buy gateways.

Calling Method

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

URI

GET /v2/{project_id}/apigw/available-zones

Table 3-1271 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .

Request Parameters

Table 3-1272 Request header parameters

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

Response Parameters

Status code: 200

Table 3-1273 Response body parameters

Parameter	Type	Description
available_zones	Array of AvailableZone objects	AZ list.

Table 3-1274 AvailableZone

Parameter	Type	Description
name	String	AZ name.
id	String	Error message.
code	String	AZ code.
port	String	AZ port.
local_name	LocalName object	AZ names.
specs	Map<String, Boolean>	Gateway editions available in the AZ.

Table 3-1275 LocalName

Parameter	Type	Description
en_us	String	AZ name.
zh_cn	String	AZ name.

Status code: 401

Table 3-1276 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1277 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1278 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "available_zones": [ {
    "code": "xx-xxx-4a",
    "id": "effdcbc7d4d64a02aa1fa26b42f56533",
    "local_name": {
      "en_us": "AZ1",
      "zh_cn": "<Name_of_AZ1>"
    },
    "name": "<Name_of_AZ1>",
    "port": "8403",
    "specs": {
      "BASIC": true,
      "BASIC_IPV6": false,
      "ENTERPRISE": true,
      "ENTERPRISE_IPV6": false,
      "PLATINUM": true,
      "PLATINUM_IPV6": false,
      "PROFESSIONAL": true,
      "PROFESSIONAL_IPV6": false,
      "TRIAL": true
    }
  }, {
    "code": "xx-xxx-4b",
    "id": "a0865121f83b41cbafce65930a22a6e8",
    "local_name": {
      "en_us": "AZ2",
      "zh_cn": "<Name_of_AZ2>"
    },
    "name": "<Name_of_AZ2>",
    "port": "8404",
    "specs": {
```

```
"BASIC" : true,  
"BASIC_IPV6" : true,  
"ENTERPRISE" : true,  
"ENTERPRISE_IPV6" : true,  
"PLATINUM" : true,  
"PLATINUM_IPV6" : false,  
"PROFESSIONAL" : true,  
"PROFESSIONAL_IPV6" : true,  
"TRIAL" : true  
}  
}]  
}
```

Status code: 401

Unauthorized

```
{  
  "error_code" : "APIC.7102",  
  "error_msg" : "Incorrect token or token resolution failed"  
}
```

Status code: 403

Forbidden

```
{  
  "error_code" : "APIC.7106",  
  "error_msg" : "No permissions to request for the method"  
}
```

Status code: 500

Internal Server Error

```
{  
  "error_code" : "APIC.9000",  
  "error_msg" : "Failed to request internal service"  
}
```

Status Codes

Status Code	Description
200	OK
401	Unauthorized
403	Forbidden
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.24.11 Querying Dedicated Gateways

Function

This API is used to query dedicated gateways.

Calling Method

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

URI

GET /v2/{project_id}/apigw/instances

Table 3-1279 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .

Table 3-1280 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Long	Offset from which the query starts. If the value is less than 0, it is automatically converted to 0. Default: 0
limit	No	Integer	Number of items displayed on each page. A value less than or equal to 0 will be automatically converted to 20, and a value greater than 500 will be automatically converted to 500. Minimum: 1 Maximum: 500 Default: 20
instance_id	No	String	Gateway ID.
instance_name	No	String	Gateway name.

Parameter	Mandatory	Type	Description
status	No	String	<p>Gateway status.</p> <ul style="list-style-type: none"> • Creating • CreateSuccess • CreateFail • Initing • Registering • Running • InitingFailed • RegisterFailed • Installing • InstallFailed • Updating • UpdateFailed • Rollbacking • RollbackSuccess • RollbackFailed • Deleting • DeleteFailed • Unregistering • UnRegisterFailed • CreateTimeout • InitTimeout • RegisterTimeout • InstallTimeout • UpdateTimeout • RollbackTimeout • DeleteTimeout • UnregisterTimeout • Starting • Freezing • Frozen • Restarting • RestartFail • Unhealthy • RestartTimeout <p>Enumeration values:</p> <ul style="list-style-type: none"> • Creating • CreateSuccess • CreateFail

Parameter	Mandatory	Type	Description
			<ul style="list-style-type: none"> • Initing • Registering • Running • InitingFailed • RegisterFailed • Installing • InstallFailed • Updating • UpdateFailed • Rollbacking • RollbackSuccess • RollbackFailed • Deleting • DeleteFailed • Unregistering • UnRegisterFailed • CreateTimeout • InitTimeout • RegisterTimeout • InstallTimeout • UpdateTimeout • RollbackTimeout • DeleteTimeout • UnregisterTimeout • Starting • Freezing • Frozen • Restarting • RestartFail • Unhealthy • RestartTimeout

Request Parameters

Table 3-1281 Request header parameters

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

Response Parameters

Status code: 200

Table 3-1282 Response body parameters

Parameter	Type	Description
size	Integer	Length of the returned resource list.
total	Long	Number of resources that match the query conditions.
instances	Array of RespInstanceBase objects	Gateway list.

Table 3-1283 RespInstanceBase

Parameter	Type	Description
id	String	Gateway ID.
project_id	String	ID of the tenant to which the gateway belongs.
instance_name	String	Gateway name.

Parameter	Type	Description
status	String	<p>Instance status:</p> <ul style="list-style-type: none"> ● Creating: The instance is being created. ● CreateSuccess: The instance is created successfully. ● CreateFail: The instance fails to be created. ● Initing: The instance is being initialized. ● Registering: The instance is being registered. ● Running: The instance is running. ● InitingFailed: The instance fails to be initialized. ● RegisterFailed: The instance fails to be registered. ● Installing: The instance is being installed. ● InstallFailed: The instance fails to be installed. ● Updating: The instance is being upgraded. ● UpdateFailed: The instance fails to be upgraded. ● Rollbacking: The instance is being rolled back. ● RollbackSuccess: The instance is rolled back successfully. ● RollbackFailed: The instance fails to be rolled back. ● Deleting: The instance is being deleted. ● DeleteFailed: The instance fails to be deleted. ● Unregistering: The instance is being deregistered. ● UnRegisterFailed: The instance fails to be deregistered. ● CreateTimeout: Creation of the instance times out. ● InitTimeout: Initialization of the instance times out. ● RegisterTimeout: Registration of the instance times out. ● InstallTimeout: Installation of the instance times out. ● UpdateTimeout: Upgrading of the instance times out. ● RollbackTimeout: Rollback of the instance times out.

Parameter	Type	Description
		<ul style="list-style-type: none"> ● DeleteTimeout: Deletion of the instance times out. ● UnregisterTimeout: Deregistration of the instance times out. ● Starting: The instance is being started. ● Freezing: The instance is being frozen. ● Frozen: The instance is frozen. ● Restarting: The instance is being restarted. ● RestartFail: The instance fails to be restarted. ● Unhealthy: The instance is abnormal. ● RestartTimeout: Restart of the instance times out. ● Resizing: The instance specification is changing. ● ResizeFailed: The instance specification fails to be changed. ● ResizeTimeout: The instance specification change times out. <p>Enumeration values:</p> <ul style="list-style-type: none"> ● Creating ● CreateSuccess ● CreateFail ● Initing ● Registering ● Running ● InitingFailed ● RegisterFailed ● Installing ● InstallFailed ● Updating ● UpdateFailed ● Rollbacking ● RollbackSuccess ● RollbackFailed ● Deleting ● DeleteFailed ● Unregistering ● UnRegisterFailed ● CreateTimeout

Parameter	Type	Description
		<ul style="list-style-type: none">• InitTimeout• RegisterTimeout• InstallTimeout• UpdateTimeout• RollbackTimeout• DeleteTimeout• UnregisterTimeout• Starting• Freezing• Frozen• Restarting• RestartFail• Unhealthy• RestartTimeout• Resizing• ResizeFailed• ResizeTimeout

Parameter	Type	Description
instance_statuses	Integer	<p>Instance status ID:</p> <ul style="list-style-type: none"> ● 1: Creating ● 2: Created successfully ● 3: Creation failed ● 4: Initializing ● 5: Registering ● 6: Running ● 7: Initialization failed ● 8: Registration failed ● 10: Installing ● 11: Installation failed ● 12: Upgrading ● 13: Upgrade failed ● 20: Rolling back ● 21: Rolled back ● 22: Rollback failed ● 23: Deleting ● 24: Deletion failed ● 25: Deregistering ● 26: Deregistration failed ● 27: Creation timed out ● 28: Initialization timed out ● 29: Registration timed out ● 30: Installation timed out ● 31: Upgrade timed out ● 32: Rollback timed out ● 33: Deletion timed out ● 34: Deregistration timed out ● 35: Starting ● 36: Freezing ● 37: Frozen ● 38: Restarting ● 39: Restart failed ● 40: Abnormal ● 41: Restart timed out ● 42: Changing specification ● 43: Specification change failed ● 44: Specification change timed out

Parameter	Type	Description
		<p>Enumeration values:</p> <ul style="list-style-type: none">• 1• 2• 3• 4• 5• 6• 7• 8• 10• 11• 12• 13• 20• 21• 22• 23• 24• 25• 26• 27• 28• 29• 30• 31• 32• 33• 34• 35• 36• 37• 38• 39• 40• 41• 42• 43• 44

Parameter	Type	Description
type	String	Gateway type. The default value is apig.
spec	String	Gateway edition. <ul style="list-style-type: none"> • BASIC • PROFESSIONAL • ENTERPRISE • PLATINUM • BASIC_IPV6 • PROFESSIONAL_IPV6 • ENTERPRISE_IPV6 • PLATINUM_IPV6 Enumeration values: <ul style="list-style-type: none"> • BASIC • PROFESSIONAL • ENTERPRISE • PLATINUM • BASIC_IPV6 • PROFESSIONAL_IPV6 • ENTERPRISE_IPV6 • PLATINUM_IPV6
create_time	Long	Time when the gateway is created. The time is in the Unix timestamp format.
enterprise_project_id	String	Enterprise project ID. This parameter is required for an enterprise account.
eip_address	String	EIP bound to the gateway.
charging_mode	Integer	Billing mode of the gateway. <ul style="list-style-type: none"> • 0: pay-per-use • 1: This parameter is not used currently. Enumeration values: <ul style="list-style-type: none"> • 0 • 1
cbc_metadata	String	This parameter is not used currently.

Parameter	Type	Description
loadbalancer_provider	String	Type of the load balancer used by the gateway. <ul style="list-style-type: none"> • LVS • ELB (available only in certain regions) Default: lvs Enumeration values: <ul style="list-style-type: none"> • lvs • elb
cbc_operation_locks	Array of CbcOperationLock objects	Cloud operations restriction lock

Table 3-1284 CbcOperationLock

Parameter	Type	Description
lock_scene	String	Restriction scenarios: <ul style="list-style-type: none"> • TO_PERIOD_LOCK: Changing the billing mode from pay-per-use to yearly/monthly. In this scenario, deleting resources, changing specifications, and changing from pay-per-use to yearly/monthly are not allowed. • SPEC_CHG_LOCK: Changing specifications of the yearly/monthly billing mode. In this scenario, deleting resources and changing specifications are not allowed. Enumeration values: <ul style="list-style-type: none"> • TO_PERIOD_LOCK • PEC_CHG_LOCK
lock_source_id	String	ID of the object that initiates the restriction

Status code: 401

Table 3-1285 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1286 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1287 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "total" : 2,
  "size" : 2,
  "instances" : [ {
    "cbc_metadata" : "CS2006301043A28NF:00301-734023-0--0",
    "charging_mode" : 1,
    "create_time" : 1585302825070,
    "eip_address" : "xxx.xxx.xxx.xxx",
    "enterprise_project_id" : "0",
    "id" : "eddc4d25480b4cd6b512f270a1b8b341",
    "instance_name" : "apig-Enterprise_Project_Pay-per-Use",
    "instance_status" : 6,
    "project_id" : "73d69ae0cfcf460190522d06b60f05ad",
    "spec" : "PROFESSIONAL",
    "status" : "Running",
    "type" : "apig"
  }, {
    "charging_mode" : 0,
    "create_time" : 1594370987422,
    "eip_address" : "xxx.xxx.xxx.xxx",
    "enterprise_project_id" : "0",
    "id" : "2e2d613c64094a4a94ad38e7ca30adee",
    "instance_name" : "apig-autotest-apitest-nodelete",
    "instance_status" : 6,
    "project_id" : "73d69ae0cfcf460190522d06b60f05ad",
    "spec" : "PROFESSIONAL",
    "status" : "Running",
    "type" : "apig",
  }
]
```

```
"cbc_operation_locks" : [ {
  "lock_scene" : "TO_PERIOD_LOCK",
  "lock_source_id" : "CxxxxxxxxxM"
} ]
}
```

Status code: 401

Unauthorized

```
{
  "error_code" : "APIC.7102",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIC.7106",
  "error_msg" : "No permissions to request for the method"
}
```

Status code: 500

Internal Server Error

```
{
  "error_code" : "APIC.9000",
  "error_msg" : "Failed to request internal service"
}
```

Status Codes

Status Code	Description
200	OK
401	Unauthorized
403	Forbidden
500	Internal Server Error

Error Codes

See [Error Codes](#).

3.24.12 Deleting a Dedicated Gateway

Function

This API is used to delete a dedicated gateway.

Calling Method

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

URI

DELETE /v2/{project_id}/apigw/instances/{instance_id}

Table 3-1288 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see Obtaining a Project ID .
instance_id	Yes	String	Gateway ID, which can be obtained from the gateway information on the APIG console.

Request Parameters

Table 3-1289 Request header parameters

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

Response Parameters

Status code: 401

Table 3-1290 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 403

Table 3-1291 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Status code: 404

Table 3-1292 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 3-1293 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

None

Example Responses

Status code: 401

Unauthorized

```
{
  "error_code" : "APIC.7102",
  "error_msg" : "Incorrect token or token resolution failed"
}
```

Status code: 403

Forbidden

```
{
  "error_code" : "APIC.7106",
  "error_msg" : "No permissions to request for the method"
}
```

Status code: 404

Not Found

```
{
  "error_code" : "APIC.7302",
```

```
{  
  "error_msg" : "Instance not found"  
}
```

Status code: 500

Internal Server Error

```
{  
  "error_code" : "APIC.9000",  
  "error_msg" : "Failed to request internal service"  
}
```

Status Codes

Status Code	Description
204	No Content
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

Error Codes

See [Error Codes](#).

4 Permissions Policies and Supported Actions

This chapter describes fine-grained permissions management for your APIG.

NOTE

- If your account does not require individual IAM users, skip this section.
- Only **dedicated** gateways support fine-grained permissions management.

By default, new IAM users do not have permissions assigned. You need to add a user to one or more groups, and attach permissions policies or roles (in JSON format) to these groups. Users inherit permissions from the groups to which they are added and can perform specified operations on cloud services based on the permissions.

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

Supported Actions

Operations supported by policies are specific to APIs. The following are common concepts related to policies:

- **Permission:** A statement in a policy that allows or denies certain operations.
- **Action:** Specific operations that are allowed or denied.
- **API:** REST APIs that can be called by a user who has been granted specific permissions.
- **Authorization scope:** Type of projects in which policies can be used to grant permissions. A policy can be applied to IAM projects, enterprise projects, or both. Policies that contain actions for both IAM and enterprise projects can be used and take effect for both IAM and Enterprise Management. Policies that only contain actions for IAM projects can be used and only take effect for IAM.

APIG supports actions that can be defined in custom policies. Permissions must be obtained before calling APIs provided by APIG.

Table 4-1 Supported actions

Description	Action	API	IAM Project	Enterprise Project
Creating a dedicated gateway	apig:instance:create	POST /v2/{project_id}/apigw/instances	√	√
Deleting a dedicated gateway	apig:instance:delete	DELETE /v2/{project_id}/apigw/instances/{instance_id}	√	√
Updating a dedicated gateway	apig:instance:update	PUT /v2/{project_id}/apigw/instances/{instance_id}	√	√
Querying details of a dedicated gateway	apig:instance:get	GET /v2/{project_id}/apigw/instances/{instance_id}	√	√
Querying a dedicated gateway list	apig:instance:list	GET /v2/{project_id}/apigw/instances	√	√
Creating an API group	apig:groups:create	POST /v2/{project_id}/apigw/instances/{instance_id}/api-groups	√	√
Deleting an API group	apig:groups:delete	DELETE /v2/{project_id}/apigw/instances/{instance_id}/api-groups/{group_id}	√	√
Querying details of an API group	apig:groups:get	GET /v2/{project_id}/apigw/instances/{instance_id}/api-groups/{group_id}	√	√
Querying an API group list	apig:groups:list	GET /v2/{project_id}/apigw/instances/{instance_id}/api-groups	√	√

Description	Action	API	IAM Project	Enterprise Project
Binding a domain name to an API group	apig:domains:create	POST /v2/{project_id}/apigw/instances/{instance_id}/api-groups/{group_id}/domains	√	√
Deleting a domain name bound to an API group	apig:domains:delete	DELETE /v2/{project_id}/apigw/instances/{instance_id}/api-groups/{group_id}/domains/{domain_id}	√	√
Adding a certificate to a domain name	apig:domains:bindCertificate	POST /v2/{project_id}/apigw/instances/{instance_id}/api-groups/{group_id}/domains/{domain_id}/certificate	√	√
Deleting a certificate bound to a domain name	apig:domains:unbindCertificate	DELETE /v2/{project_id}/apigw/instances/{instance_id}/api-groups/{group_id}/domains/{domain_id}/certificate/{certificate_id}	√	√
Querying details of a certificate bound to a domain name	apig:domains:getCertificate	GET /v2/{project_id}/apigw/instances/{instance_id}/api-groups/{group_id}/domains/{domain_id}/certificate/{certificate_id}	√	√
Creating an environment variable	apig:variables:create	POST /v2/{project_id}/apigw/instances/{instance_id}/env-variables	√	√
Deleting an environment variable	apig:variables:delete	DELETE /v2/{project_id}/apigw/instances/{instance_id}/env-variables/{env_variable_id}	√	√
Querying details of an environment variable	apig:variables:get	GET /v2/{project_id}/apigw/instances/{instance_id}/env-variables/{env_variable_id}	√	√

Description	Action	API	IAM Project	Enterprise Project
Querying an environment variable list	apig:variable:list	GET /v2/{project_id}/apigw/instances/{instance_id}/env-variables	√	√
Creating an API	apig:apis:create	POST /v2/{project_id}/apigw/instances/{instance_id}/apis	√	√
Deleting an API	apig:apis:delete	DELETE /v2/{project_id}/apigw/instances/{instance_id}/apis/{api_id}	√	√
Publishing an API	apig:apis:publish	POST /v2/{project_id}/apigw/instances/{instance_id}/apis/action	√	√
Taking an API offline	apig:apis:offline	POST /v2/{project_id}/apigw/instances/{instance_id}/apis/action	√	√
Debugging an API	apig:apis:debug	POST /v2/{project_id}/apigw/instances/{instance_id}/apis/debug/{api_id}	√	√
Importing an API	apig:apis:import	POST /v2/{project_id}/apigw/instances/{instance_id}/openapi/import	√	√
Exporting an API	apig:apis:export	POST /v2/{project_id}/apigw/instances/{instance_id}/openapi/export	√	√
Authorizing an app to access an API	apig:apis:grantAppAccess	POST /v2/{project_id}/apigw/instances/{instance_id}/app-auths	√	√
Canceling the authorization of an app for accessing an API	apig:apis:revokeAppAccess	DELETE /v2/{project_id}/apigw/instances/{instance_id}/app-auths/{app_auth_id}	√	√
Binding a signature key to an API	apig:apis:bindSigns	POST /v2/{project_id}/apigw/instances/{instance_id}/sign-bindings	√	√

Description	Action	API	IAM Project	Enterprise Project
Unbinding a signature key from an API	apig:apis:unbindSigns	DELETE /v2/{project_id}/apigw/instances/{instance_id}/sign-bindings/{sign_bindings_id}	√	√
Binding an access control policy to an API	apig:apis:bindAcls	POST /v2/{project_id}/apigw/instances/{instance_id}/acl-bindings	√	√
Unbinding an access control policy from an API	apig:apis:unbindAcls	DELETE /v2/{project_id}/apigw/instances/{instance_id}/acl-bindings/{acl_bindings_id}	√	√
Binding a request throttling policy to an API	apig:apis:bindThrottles	POST /v2/{project_id}/apigw/instances/{instance_id}/throttle-bindings	√	√
Unbinding a request throttling policy from an API	apig:apis:unbindThrottles	DELETE /v2/{project_id}/apigw/instances/{instance_id}/throttle-bindings/{throttle_binding_id}	√	√
Querying details of an API	apig:apis:get	GET /v2/{project_id}/apigw/instances/{instance_id}/apis/{api_id}	√	√
Querying an API list	apig:apis:list	GET /v2/{project_id}/apigw/instances/{instance_id}/apis	√	√
Querying the list of apps bound to an API	apig:apis:listBindedApps	GET /v2/{project_id}/apigw/instances/{instance_id}/app-auths/binded-apps	√	√

Description	Action	API	IAM Project	Enterprise Project
Querying the list of signature keys bound to an API	apig:apis:listBindedSigns	GET /v2/{project_id}/apigw/instances/{instance_id}/sign-bindings/binded-signs	√	√
Querying the list of access control policies bound to an API	apig:apis:listBindedAcls	GET /v2/{project_id}/apigw/instances/{instance_id}/acl-bindings/binded-acls	√	√
Querying the list of request throttling policies bound to an API	apig:apis:listBindedTrottl	GET /v2/{project_id}/apigw/instances/{instance_id}/throttle-bindings/binded-throttles	√	√
Creating an environment	apig:envs:create	POST /v2/{project_id}/apigw/instances/{instance_id}/envs	√	√
Deleting an environment	apig:envs:delete	DELETE /v2/{project_id}/apigw/instances/{instance_id}/envs/{env_id}	√	√
Querying an environment list	apig:envs:list	GET /v2/{project_id}/apigw/instances/{instance_id}/envs	√	√
Creating an app	apig:apps:create	POST /v2/{project_id}/apigw/instances/{instance_id}/apps	√	√
Deleting an app	apig:apps:delete	DELETE /v2/{project_id}/apigw/instances/{instance_id}/apps/{app_id}	√	√
Querying details of an app	apig:apps:get	GET /v2/{project_id}/apigw/instances/{instance_id}/apps/{app_id}	√	√

Description	Action	API	IAM Project	Enterprise Project
Querying an app list	apig:apps:list	GET /v2/{project_id}/apigw/instances/{instance_id}/apps	√	√
Querying the list of APIs bound to an app	apig:apps:listBindedApis	GET /v2/{project_id}/apigw/instances/{instance_id}/app-auths/binded-apis	√	√
Querying the list of APIs not bound to an app	apig:apps:listUnbindedApis	GET /v2/{project_id}/apigw/instances/{instance_id}/app-auths/unbinded-apis	√	√
Creating a signature key	apig:signs:create	POST /v2/{project_id}/apigw/instances/{instance_id}/signs	√	√
Deleting a signature key	apig:signs:delete	DELETE /v2/{project_id}/apigw/instances/{instance_id}/signs/{sign_id}	√	√
Querying a signature key list	apig:signs:list	GET /v2/{project_id}/apigw/instances/{instance_id}/signs	√	√
Querying the list of APIs bound to a signature key	apig:signs:listBindedApis	GET /v2/{project_id}/apigw/instances/{instance_id}/sign-bindings/binded-apis	√	√
Querying the list of APIs not bound to a signature key	apig:signs:listUnbindedApis	GET /v2/{project_id}/apigw/instances/{instance_id}/sign-bindings/unbinded-apis	√	√
Creating an access control policy	apig:acls:create	POST /v2/{project_id}/apigw/instances/{instance_id}/acls	√	√

Description	Action	API	IAM Project	Enterprise Project
Deleting an access control policy	apig:acls:delete	DELETE /v2/{project_id}/apigw/instances/{instance_id}/acls/{acl_id}	√	√
Querying details of an access control policy	apig:acls:get	GET /v2/{project_id}/apigw/instances/{instance_id}/acls/{acl_id}	√	√
Querying an access control policy list	apig:acls:list	GET /v2/{project_id}/apigw/instances/{instance_id}/acls	√	√
Querying the list of APIs bound to an access control policy	apig:acls:listBindedApis	GET /v2/{project_id}/apigw/instances/{instance_id}/acl-bindings/binded-apis	√	√
Querying the list of APIs not bound to an access control policy	apig:acls:listUnbindedApis	GET /v2/{project_id}/apigw/instances/{instance_id}/acl-bindings/unbinded-apis	√	√
Creating a request throttling policy	apig:throttles:create	POST /v2/{project_id}/apigw/instances/{instance_id}/throttles	√	√
Deleting a request throttling policy	apig:throttles:delete	DELETE /v2/{project_id}/apigw/instances/{instance_id}/throttles/{throttle_id}	√	√
Querying details of a request throttling policy	apig:throttles:get	GET /v2/{project_id}/apigw/instances/{instance_id}/throttles/{throttle_id}	√	√

Description	Action	API	IAM Project	Enterprise Project
Querying a request control policy list	apig:throttles:list	GET /v2/{project_id}/apigw/instances/{instance_id}/throttles	√	√
Querying the list of APIs bound to a request control policy	apig:throttles:listBindedApis	GET /v2/{project_id}/apigw/instances/{instance_id}/throttle-bindings/binded-apis	√	√
Querying the list of APIs not bound to a request control policy	apig:throttles:listUnbindedApis	GET /v2/{project_id}/apigw/instances/{instance_id}/throttle-bindings/unbinded-apis	√	√
Creating an excluded request throttling configuration	apig:specialThrottles:create	POST /v2/{project_id}/apigw/instances/{instance_id}/throttles/{throttle_id}/throttle-specials	√	√
Deleting an excluded request throttling configuration	apig:specialThrottles:delete	DELETE /v2/{project_id}/apigw/instances/{instance_id}/throttles/{throttle_id}/throttle-specials/{strategy_id}	√	√
Querying excluded request throttling configurations	apig:specialThrottles:get	GET /v2/{project_id}/apigw/instances/{instance_id}/throttles/{throttle_id}/throttle-specials	√	√
Creating a VPC channel	apig:vpcChannels:create	POST /v2/{project_id}/apigw/instances/{instance_id}/vpc-channels	√	√

Description	Action	API	IAM Project	Enterprise Project
Deleting a VPC channel	apig:vpcChannels:delete	DELETE /v2/{project_id}/apigw/instances/{instance_id}/vpc-channels/{vpc_channel_id}	√	√
Updating a VPC channel	apig:vpcChannels:update	PUT /v2/{project_id}/apigw/instances/{instance_id}/vpc-channels/{vpc_channel_id}	√	√
Creating a backend instance	apig:vpcChannels:addInstance	POST /v2/{project_id}/apigw/instances/{instance_id}/vpc-channels/{vpc_channel_id}/members	√	√
Deleting a backend instance	apig:vpcChannels:deleteInstance	DELETE /v2/{project_id}/apigw/instances/{instance_id}/vpc-channels/{vpc_channel_id}/members/{member_id}	√	√
Querying details of a VPC channel	apig:vpcs:get	GET /v2/{project_id}/apigw/instances/{instance_id}/vpc-channels/{vpc_channel_id}	√	√
Querying a VPC channel list	apig:vpcs:list	GET /v2/{project_id}/apigw/instances/{instance_id}/vpc-channels	√	√
Creating a custom authorizer	apig:authorizers:create	POST /v2/{project_id}/apigw/instances/{instance_id}/authorizers	√	√
Deleting a custom authorizer	apig:authorizers:delete	DELETE /v2/{project_id}/apigw/instances/{instance_id}/authorizers/{authorizer_id}	√	√
Querying details of a custom authorizer	apig:authorizers:get	GET /v2/{project_id}/apigw/instances/{instance_id}/authorizers/{authorizer_id}	√	√
Query a custom authorizer list	apig:authorizers:list	GET /v2/{project_id}/apigw/instances/{instance_id}/authorizers	√	√
Querying a tag list	apig:tags:list	GET /v2/{project_id}/apigw/instances/{instance_id}/tags	√	√

Description	Action	API	IAM Project	Enterprise Project
Querying an instance feature list	apig:features:list	GET /v2/{project_id}/apigw/instances/{instance_id}/features	√	√
Creating an instance feature	apig:features:create	POST /v2/{project_id}/apigw/instances/{instance_id}/features	√	√

A Appendix

A.1 Pagination Query

APIG supports pagination query of resource lists, such as an API list.

To perform a pagination query, add the following parameters to the URL:

- **page_size**: number of records to be displayed on each page. If this parameter is not specified, the default value **20** is used. The maximum value is **500**.
- **page_no**: page number for displaying query results.

Example:

```
GET /v1.0/apigw/apis?page_size=10&page_no=5
```

A.2 Result Filtering

APIG filters query results by object attribute when you query a resource list, such as an API list.

Example:

```
GET /v1.0/apigw/apis?id=xxxx
```

A.3 HTTP Status Codes

[Table A-1](#) describes common status codes.

Table A-1 HTTP status codes

Status Code & Message	Description
200 OK	The request has been processed successfully.
204 No Content	The server successfully processed the request and is not returning any content.

Status Code & Message	Description
400 Bad Request	The server failed to process the request. Possible causes include: 1. Malformed request syntax 2. Invalid request message framing
401 Unauthorized	The request requires user authentication. For example, the username and password are required.
403 Forbidden	The server understood the request, but is refusing to fulfill it.
404 Not Found	The server has not found anything matching the request URI.
405 Method Not Allowed	The method specified in the request line is not allowed for the resource identified by the request URI.
406 Not Acceptable	The response generated by the server could not be accepted by the client.
407 Proxy Authentication Required	You must first authenticate yourself with the proxy.
408 Request Timeout	The server timed out waiting for the request.
409 Conflict	The request could not be completed due to a conflict with the current state of the resource.
410 Gone	The requested resource is no longer available at the server and no forwarding address is known.
412 Precondition Failed	The server does not meet one of the preconditions that the requester put on the request.
500 Internal Server Error	The server encountered an unexpected condition which prevented it from fulfilling the request.
501 Not Implemented	The server does not support the functionality required to fulfill the request.
502 Bad Gateway	The server, while acting as a gateway or proxy, received an invalid response from the upstream server it accessed in attempting to fulfill the request.
503 Service Unavailable	The server is currently unable to handle the request due to a temporary overloading or maintenance of the server.
504 Gateway Timeout	The server was acting as a gateway or proxy and did not receive a timely response from the upstream server.

A.4 Error Codes

Status Code	Error Codes	Error Message	Description	Solution
204	APIG.0000	Successful	Successful	You do not need to take any actions.
400	APIC.7211	Parameter value does not match the rules	Parameter value does not match the rules	Modify the parameter value.
400	APIC.7230	The maintenance time window must be 4 hours.	The maintenance time window must be 4 hours.	Modify the maintenance time window to 4 hours.
400	APIC.7235	The maintenance time window must start or end with 2, 6, 10, 14, 18, or 22.	The maintenance time window must start or end with 2, 6, 10, 14, 18, or 22.	Modify the maintenance time window to start or end with 2, 6, 10, 14, 18, or 22.
400	APIC.7238	An AZ must be specified.	An AZ must be specified.	Specify an AZ when creating a gateway.
400	APIC.7239	Invalid IP address.	Invalid IP address.	Enter a valid IP address.
400	APIC.7241	An enterprise project ID must be specified if you are an enterprise user.	An enterprise project ID must be specified if you are an enterprise user.	Specify an enterprise project ID.
400	APIC.7242	Load balancing is not supported by this edition.	Load balancing is not supported by this edition.	Change the gateway edition.
400	APIC.7243	Scale-up is not supported by this edition.	Scale-up is not supported by this edition.	Change the gateway edition.

Status Code	Error Codes	Error Message	Description	Solution
400	APIC.7244	The bandwidth cannot be updated.	The bandwidth cannot be updated.	Do not perform this operation.
400	APIC.7500	The gateway name already exists.	The gateway name already exists.	Use another gateway name.
400	APIC.7503	Parameters az and azList cannot be used at the same time.	Parameters az and azList cannot be used at the same time.	Delete az or azList.
400	APIC.7505	The gateway ID already exists.	The gateway ID already exists.	Change the gateway ID.
400	APIC.9206	Failed to create the gateway.	Failed to create the gateway.	If the resources are insufficient, expand the resources. If the network is abnormal, check the service network for connectivity.
400	APIC.9208	Failed to disable public outbound access.	Failed to disable public outbound access.	Contact technical support to view the logs.
400	APIC.9210	create cloud nat eip failed	create cloud nat eip failed	Contact technical support to view the background logs.
400	APIC.9211	update bandwidth size failed	update bandwidth size failed	Contact technical support.
400	APIC.9215	Failed to scale up the gateway.	Failed to scale up the gateway.	Contact technical support to view the background logs.
400	APIC.9216	Failed to enable public inbound access.	Failed to enable public inbound access.	Contact technical support to view the background logs.

Status Code	Error Codes	Error Message	Description	Solution
400	APIC.9217	Failed to accept VPC peering connection or create route	Failed to accept VPC peering connection or create route	Connect technical support to view background logs.
400	APIC.9218	Create instance failed due to insufficient quota.	Create instance failed due to insufficient quota.	Increase the quota and try again.
400	APIC.9219	Create instance failed due to insufficient resources.	Create instance failed due to insufficient resources.	Expand the resource capacity and try again.
400	APIC.9222	Lock gateway operation failed.	Lock gateway operation failed.	Contact technical support.
400	APIG.1119	No permissions to perform this operation.	No permissions to perform this operation.	Apply for the required permissions and try again.
400	APIG.1120	No permissions to create ELB channels.	No permissions to create ELB channels.	Ensure that the ELB channel belongs to your account. If you are an IAM user, apply for the required permissions.
400	APIG.1201	The resources belong to different tenants.	The resources belong to different tenants.	Ensure that the resources belong to the same tenant.
400	APIG.2000	Parameter error.	Parameter error.	Modify the request parameters based on the reasons stated in the API response.
400	APIG.2001	The request parameters must be specified.	The request parameters must be specified.	Set request parameters.

Status Code	Error Codes	Error Message	Description	Solution
400	APIG.2002	The parameter value is too small.	The parameter value is too small.	Modify the request parameter.
400	APIG.2003	The parameter value is too large.	The parameter value is too large.	Modify the request parameter.
400	APIG.2004	The parameter value is outside the allowable range.	The parameter value is outside the allowable range.	Modify the request parameter.
400	APIG.2005	The parameter is too short.	The parameter is too short.	Modify the request parameter.
400	APIG.2006	The parameter is too long.	The parameter is too long.	Modify the request parameter.
400	APIG.2007	Invalid length.	Invalid length.	Modify the request parameter.
400	APIG.2008	Only letters are allowed.	Only letters are allowed.	Modify the request parameter.
400	APIG.2009	Only digits are allowed.	Only digits are allowed.	Modify the request parameter.
400	APIG.2010	Only letters and digits are allowed.	Only letters and digits are allowed.	Modify the request parameter.
400	APIG.2011	Invalid parameter value.	Invalid parameter value.	Modify the request parameter.
400	APIG.2012	Invalid parameter value.	Invalid parameter value.	Modify the request parameter.

Status Code	Error Codes	Error Message	Description	Solution
400	APIG.2013	Only letters, digits, hyphens (-), and underscores (_) are allowed.	Only letters, digits, hyphens (-), and underscores (_) are allowed.	Modify the request parameter.
400	APIG.2014	Invalid email address.	Invalid email address.	Modify the request parameter.
400	APIG.2015	Invalid IP address.	Invalid IP address.	Modify the request parameter.
400	APIG.2016	The characters are not encoded using Base 64.	The characters are not encoded using Base 64.	Change the value of the request parameter to a Base 64-encoded character string.
400	APIG.2017	Invalid mobile number.	Invalid mobile number.	Modify the request parameter.
400	APIG.2018	Invalid telephone number.	Invalid telephone number.	Modify the request parameter.
400	APIG.2019	Invalid telephone or mobile number.	Invalid telephone or mobile number.	Modify the request parameter.
400	APIG.2020	Invalid postal code.	Invalid postal code.	Modify the request parameter.
400	APIG.2021	The URL domain is not included in the IP address whitelist.	The URL domain is not included in the IP address whitelist.	Modify the request parameter.
400	APIG.2022	The URL domain is included in the IP address blacklist.	The URL domain is included in the IP address blacklist.	Modify the request parameter.

Status Code	Error Codes	Error Message	Description	Solution
400	APIG.2023	URL domain CNAME resolution failed.	URL domain CNAME resolution failed.	Register the CNAME resolution record of the domain name.
400	APIG.2024	Invalid URL domain.	Invalid URL domain.	Use a correct domain name.
400	APIG.2025	Invalid port number.	Invalid port number.	Use a correct port number.
400	APIG.2026	The request path parameters are not defined.	The request path parameters are not defined.	Add the parameters contained in the request path to the request parameters.
400	APIG.2027	The backend path parameters are not defined.	The backend path parameters are not defined.	Add the parameters contained in the backend request path to the backend parameters.
400	APIG.2028	The request parameters mapped to the backend parameters are not defined.	The request parameters mapped to the backend parameters are not defined.	Map the backend parameters to the correct request parameters.
400	APIG.2029	The default certificate already exists.	The default certificate already exists.	Contact technical support.
400	APIG.2030	Bad request for debugging the API.	Bad request for debugging the API.	Set correct API debugging parameters.
400	APIG.2034	The domain name has not been filed. File it first.	The domain name has not been filed. File it first.	Complete ICP filing for the domain name.
400	APIG.2035	The ICP Filing System is busy. Please try again later.	The ICP Filing System is busy. Please try again later.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
400	APIG.2036	Only APIs that use custom authentication can have authorizer parameters.	Only APIs that use custom authentication can have authorizer parameters.	Delete unnecessary parameters.
400	APIG.2041	Invalid microservice.	Invalid microservice.	Change service_id to a valid microservice ID.
400	APIG.2042	Invalid engine.	Invalid engine.	Change engine_id to a valid microservice engine ID.
400	APIG.2044	Invalid title of info	Invalid Info.title	The Info.title must meet the documents
400	APIG.2045	Parse Servers error. The Servers must meet the documents	Servers field parsing error. Servers field is invalid	The Servers must meet the documents
400	APIG.2101	The certificate and private key do not match.	The certificate and private key do not match.	Use a certificate and private key that match each other.
400	APIG.2102	The certificate has expired.	The certificate has expired.	Use a valid certificate.
400	APIG.2103	The certificate domain name and the custom domain name do not match.	The certificate domain name and the custom domain name do not match.	Ensure that the domain name in the certificate is the same as the custom domain name.
400	APIG.2104	The certificate chain is not matched.	The certificate chain is not matched.	In a certificate chain, ensure that the server certificate is in the first place and followed by other certificates in sequence.

Status Code	Error Codes	Error Message	Description	Solution
400	APIG.2105	Encrypted private keys are not supported.	Encrypted private keys are not supported.	Use unencrypted private keys.
400	APIG.2106	Invalid certificate or private key.	Invalid certificate or private key.	Use a correct certificate and private key.
400	APIG.2108	Microservice unavailable.	Microservice unavailable.	Change service_id to the ID of an available microservice.
400	APIG.2109	Invalid certificate. SAN missing.	Invalid certificate. SAN missing.	Generate a new certificate that contains a SAN.
400	APIG.3148	Invalid certificate. Add one that expires before January 19, 2038 03:14:07 UTC.	Invalid certificate. Add one that expires before January 19, 2038 03:14:07 UTC.	Invalid certificate. Add one that expires before January 19, 2038 03:14:07 UTC.
400	APIG.3201	The API group name already exists.	The API group name already exists.	Use another name.
400	APIG.3202	The API name already exists.	The API name already exists.	Use another name.
400	APIG.3203	The app name already exists.	The app name already exists.	Use another name.
400	APIG.3204	The request throttling policy name already exists.	The request throttling policy name already exists.	Use another name.
400	APIG.3205	The environment name already exists.	The environment name already exists.	Use another name.
400	APIG.3206	The access control policy name already exists.	The access control policy name already exists.	Use another name.

Status Code	Error Codes	Error Message	Description	Solution
400	APIG.3207	The signature key name already exists.	The signature key name already exists.	Use another name.
400	APIG.3208	The VPC channel name already exists.	The VPC channel name already exists.	Use another name.
400	APIG.3209	The parameter name already exists.	The parameter name already exists.	Use another name.
400	APIG.3210	The backend policy name already exists.	The backend policy name already exists.	Use another name.
400	APIG.3211	The authorizer name already exists.	The authorizer name already exists.	Use another name.
400	APIG.3212	The identity source name already exists.	The identity source name already exists.	Use another name.
400	APIG.3213	The tag name already exists.	The tag name already exists.	Use another name.
400	APIG.3216	The response name already exists.	The response name already exists.	Use another name.
400	APIG.3301	The API already exists.	The API already exists.	Change the request method and URL of the API.
400	APIG.3302	The excluded configuration already exists.	The excluded configuration already exists.	Use another name.
400	APIG.3303	The environment variable already exists.	The environment variable already exists.	Use another name.
400	APIG.3304	The purchasing order already exists.	The purchasing order already exists.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
400	APIG.3305	The URL domain name already exists.	The URL domain name already exists.	Contact technical support.
400	APIG.3306	The IP address already exists.	The IP address already exists.	Contact technical support.
400	APIG.3308	The excluded request throttling configuration already exists.	The excluded request throttling configuration already exists.	Contact technical support.
400	APIG.3309	The operation has already been performed.	The operation has already been performed.	Contact technical support.
400	APIG.3310	The AppKey already exists.	The AppKey already exists.	Use another AppKey.
400	APIG.3316	The API authorization record already exists.	The API authorization record already exists.	Use another API or app.
400	APIG.3330	VPC already bound to a microservice.	VPC already bound to a microservice.	Change vpc_channel_id to another ID not bound to any microservice.
400	APIG.3331	The orchestration rule name already exists.	The orchestration rule name already exists.	Use a unique rule name.
400	APIG.3600	JSON or YAML format error.	JSON or YAML format error.	Check whether the file to be imported is in correct YAML or JSON format.
400	APIG.3601	The Swagger file version must be 2.0.	The Swagger file version must be 2.0.	Ensure that the Swagger file version is 2.0.
400	APIG.3602	Syntax error in the Swagger file.	Syntax error in the Swagger file.	Check for syntax errors in the Swagger file.

Status Code	Error Codes	Error Message	Description	Solution
400	APIG.3603	The Swagger file content is too long.	The Swagger file content is too long.	Reduce the size of the Swagger file.
400	APIG.3608	The API Designer does not support API modification.	The API Designer does not support API modification.	Contact technical support.
400	APIG.3609	The input file is empty.	The input file is empty.	Use a file that is not empty.
400	APIG.3710	The VPC channel is being used by another third_auth plugin	The VPC channel is being used by another third_auth plugin	Unbind the third-party plug-in from the load balance channel, and then delete the load balance channel.
400	APIG.3715	A domain name can only be bound with CA certificates of the same algorithm type.	A domain name can only be bound with CA certificates of the same algorithm type.	Unbind the existing CA certificates and try again.
401	APIC.7100	Token missing. Log in again or try again later.	Token missing. Log in again or try again later.	Provide a token.
401	APIC.7101	Token expired. Try again later.	Token expired. Try again later.	Obtain a new token.
401	APIC.7102	Incorrect token or token resolution failure	Incorrect token or token resolution failure	Contact technical support to check the token encryption/decryption setting.
401	APIC.7103	Token contains no project information.	Token contains no project information.	Specify project information when obtaining a token.

Status Code	Error Codes	Error Message	Description	Solution
401	APIC.7105	Token contains no user information.	Token contains no user information.	Specify user information when obtaining a token.
401	APIC.7107	Token contains no role information.	Token contains no role information.	Specify role information when obtaining a token.
401	APIG.1000	Token missing. Log in again or try again later.	Token missing. Log in again or try again later.	Provide a token.
401	APIG.1001	Session expired. Please try again later.	Session expired. Please try again later.	Obtain another token and try again.
401	APIG.1002	Incorrect token or token resolution failed.	Incorrect token or token resolution failed..	Use a correct token.
401	APIG.1003	Token contains no project information.	Token contains no project information.	Use a token containing project information.
401	APIG.1005	No permissions to request this method	No permissions to request this method	Use a token with the required permissions.
401	APIG.1007	Token contains no domain information.	Token contains no domain information.	Contact technical support.
401	APIG.1008	Invalid domain.	Invalid domain.	Contact technical support.
401	APIG.1009	Token contains no user information.	Token contains no user information.	Use a token containing user information.
401	APIG.1010	PDP server connection failed.	PDP server connection failed.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
401	APIG.1011	You can request resources only after you complete real-name authentication.	You can request resources only after you complete real-name authentication.	Perform real-name authentication for your account and try again.
401	APIG.1012	Your account balance is insufficient. Top up your account.	Your account balance is insufficient. Top up your account.	Top up your account.
401	APIG.1013	Your account has been frozen. Some functions become unavailable. To unfreeze your account, contact customer service.	Your account has been frozen. Some functions become unavailable. To unfreeze your account, contact customer service.	Restore your account and try again.
403	APIC.7106	Operation restricted. Check at My Account.	Operation restricted. Check at My Account.	Use a token with the required permissions.
403	APIC.7109	Access denied because your account is suspended.	Access denied because your account is suspended.	Restore your account first.
403	APIC.7110	Your account only has read permissions and can only send GET requests.	Your account only has read permissions and can only send GET requests.	Contact the account administrator to grant you administrator or fine-grained permissions.
403	APIC.7111	The requested resource does not belong to your account.	The requested resource does not belong to your account.	Use a correct token.

Status Code	Error Codes	Error Message	Description	Solution
403	APIC.7118	User domain does not match.	User domain does not match.	Check the domain info.
403	APIC.7130	No permissions to access gateways in other projects.	No permissions to access gateways in other projects.	Specify the correct project ID.
403	APIC.7134	No permissions to access this enterprise project.	No permissions to access this enterprise project.	Use an enterprise project that you have permissions to access.
403	APIC.7300	You do not have permission to perform action {x} on resource {x}.	You do not have permission to perform action {x} on resource {x}.	Check your permissions.
403	APIC.7400	Maximum number of gateways reached.	Maximum number of gateways reached.	Contact technical support to increase the gateway quota.
403	APIC.7402	The number of tags exceeds the maximum allowed limit.	The number of tags exceeds the maximum allowed limit.	Delete unnecessary tags.
403	APIG.1020	Insufficient permissions.	Insufficient permissions.	Grant the read and write permissions to the user.
403	APIG.1101	No permissions to perform operations on this API group.	No permissions to perform operations on this API group.	Ensure that the API group belongs to your account. If you are an IAM user, apply for the required permissions.

Status Code	Error Codes	Error Message	Description	Solution
403	APIG.1102	No permissions to perform operations on this API.	No permissions to perform operations on this API.	Ensure that the API belongs to your account. If you are an IAM user, apply for the required permissions.
403	APIG.1103	No permissions to perform operations on this environment.	No permissions to perform operations on this environment.	Ensure that the environment belongs to your account. If you are an IAM user, apply for the required permissions.
403	APIG.1104	No permissions to perform operations on this app.	No permissions to perform operations on this app.	Ensure that the app belongs to your account. If you are an IAM user, apply for the required permissions.
403	APIG.1105	No permissions to perform operations on this request throttling policy.	No permissions to perform operations on this request throttling policy.	Ensure that the request throttling policy belongs to your account. If you are an IAM user, apply for the required permissions.
403	APIG.1106	No permissions to perform operations on this access control policy.	No permissions to perform operations on this access control policy.	Ensure that the access control policy belongs to your account. If you are an IAM user, apply for the required permissions.
403	APIG.1107	No permissions to perform operations on this configuration.	No permissions to perform operations on this configuration.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
403	APIG.1108	No permissions to perform operations on this excluded configuration.	No permissions to perform operations on this excluded configuration.	Contact technical support.
403	APIG.1109	No permissions to perform operations on this app authorization record.	No permissions to perform operations on this app authorization record.	Ensure that the app authorization information belongs to your account. If you are an IAM user, apply for the required permissions.
403	APIG.1110	No permissions to perform operations on this environment variable.	No permissions to perform operations on this environment variable.	Ensure that the environment variable belongs to your account. If you are an IAM user, apply for the required permissions.
403	APIG.1111	No permissions to perform operations on this subscription record.	No permissions to perform operations on this subscription record.	Ensure that the subscription belongs to your account. If you are an IAM user, apply for the required permissions.
403	APIG.1112	No permissions to perform operations on this signature key.	No permissions to perform operations on this signature key.	Ensure that the signature key belongs to your account. If you are an IAM user, apply for the required permissions.

Status Code	Error Codes	Error Message	Description	Solution
403	APIG.1113	No permissions to perform operations on this VPC channel.	No permissions to perform operations on this VPC channel.	Ensure that the VPC channel belongs to your account. If you are an IAM user, apply for the required permissions.
403	APIG.1115	No permissions to perform operations on this certificate.	No permissions to perform operations on this certificate.	Ensure that the certificate belongs to your account. If you are an IAM user, apply for the required permissions.
403	APIG.1116	No permissions to perform operations on this on-sale API.	No permissions to perform operations on this on-sale API.	Ensure that the API belongs to your account. If you are an IAM user, apply for the required permissions.
403	APIG.1136	No permissions to perform operations on this instance.	No permissions to perform operations on this instance.	Contact technical support.
403	APIG.1137	No permissions to perform operations on this authorizer.	No permissions to perform operations on this authorizer.	Ensure that the custom authorizer belongs to your account. If you are an IAM user, apply for the required permissions.
403	APIG.1140	No permissions to perform operations on this feature.	No permissions to perform operations on this feature.	Ensure that the feature belongs to your account. If you are an IAM user, apply for the required permissions.

Status Code	Error Codes	Error Message	Description	Solution
403	APIG.1200	No permissions to perform operations on this API Swagger file.	No permissions to perform operations on this API Swagger file.	Ensure that the Swagger file belongs to your account. If you are an IAM user, apply for the required permissions.
403	APIG.1301	No permissions to perform operations on this domain	No permissions to perform operations on this domain	The domain to be operated must be under your own account.
403	APIG.3100	The number of resources exceeds the maximum allowed limit.	The number of resources exceeds the maximum allowed limit.	Contact technical support to increase the quota.
403	APIG.3101	The number of API groups exceeds the maximum allowed limit.	The number of API groups exceeds the maximum allowed limit.	Contact technical support to increase the quota.
403	APIG.3102	The number of APIs exceeds the maximum allowed limit.	The number of APIs exceeds the maximum allowed limit.	Contact technical support to increase the quota.
403	APIG.3103	The number of apps exceeds the maximum allowed limit.	The number of apps exceeds the maximum allowed limit.	Contact technical support to increase the quota.
403	APIG.3104	The number of environments exceeds the maximum allowed limit.	The number of environments exceeds the maximum allowed limit.	Contact technical support to increase the quota.
403	APIG.3105	The number of signature keys exceeds the maximum allowed limit.	The number of signature keys exceeds the maximum allowed limit.	Contact technical support to increase the quota.

Status Code	Error Codes	Error Message	Description	Solution
403	APIG.3106	The number of variables exceeds the maximum allowed limit.	The number of variables exceeds the maximum allowed limit.	Contact technical support to increase the quota.
403	APIG.3107	The number of request throttling policies exceeds the maximum allowed limit.	The number of request throttling policies exceeds the maximum allowed limit.	Contact technical support to increase the quota.
403	APIG.3108	The number of domain names exceeds the maximum allowed limit.	The number of domain names exceeds the maximum allowed limit.	Contact technical support to increase the quota.
403	APIG.3109	The number of VPC channels exceeds the maximum allowed limit.	The number of VPC channels exceeds the maximum allowed limit.	Contact technical support to increase the quota.
403	APIG.3110	The number of cloud servers in the VPC channel exceeds the maximum allowed limit.	The number of cloud servers in the VPC channel exceeds the maximum allowed limit.	Contact technical support to increase the quota.
403	APIG.3111	The number of parameters in req_params exceeds the maximum allowed limit.	The number of parameters in req_params exceeds the maximum allowed limit.	Contact technical support to increase the quota.
403	APIG.3112	The number of access control policies exceeds the maximum allowed limit.	The number of access control policies exceeds the maximum allowed limit.	Contact technical support to increase the quota.

Status Code	Error Codes	Error Message	Description	Solution
403	APIG.3113	The number of API backend policies exceeds the maximum allowed limit.	The number of API backend policies exceeds the maximum allowed limit.	Contact technical support to increase the quota.
403	APIG.3114	The number of policy conditions exceeds the maximum allowed limit.	The number of policy conditions exceeds the maximum allowed limit.	Contact technical support to increase the quota.
403	APIG.3116	The number of authorizers exceeds the maximum allowed limit.	The number of authorizers exceeds the maximum allowed limit.	Contact technical support to increase the quota.
403	APIG.3117	The number of identity sources exceeds the maximum allowed limit.	The number of identity sources exceeds the maximum allowed limit.	Contact technical support to increase the quota.
403	APIG.3125	The number of APIs in the API group exceeds the maximum allowed limit.	The number of APIs in the API group exceeds the maximum allowed limit.	Contact technical support to increase the quota.
403	APIG.3127	The number of APIs has reached the upper limit. A maximum of xxx APIs can be imported at a time.	The number of APIs has reached the upper limit. A maximum of xxx APIs can be imported at a time.	Reduce the number of APIs to import.
403	APIG.3131	The number of AppCodes exceeds the maximum allowed limit.	The number of AppCodes exceeds the maximum allowed limit.	Contact technical support to increase the quota.

Status Code	Error Codes	Error Message	Description	Solution
403	APIG.3132	The number of Swagger APIs in the API group exceeds the maximum allowed limit.	The number of Swagger APIs in the API group exceeds the maximum allowed limit.	Contact technical support to increase the quota.
403	APIG.3133	The number of API tags exceeds the maximum allowed limit.	The number of API tags exceeds the maximum allowed limit.	Contact technical support to increase the quota.
403	APIG.3136	The number of responses exceeds the maximum allowed limit.	The number of responses exceeds the maximum allowed limit.	Contact technical support to increase the quota.
403	APIG.3150	The number of orchestration rules exceeds the maximum.	The number of orchestration rules exceeds the maximum.	Contact technical support to increase the quota of orchestration rules.
403	APIG.3151	The number of orchestration rules bound to the API exceeds the maximum.	The number of orchestration rules bound to the API exceeds the maximum.	Contact technical support to increase the quota of orchestration rules that can be bound to the API.
403	APIG.3411	The APIs belong to different tenants.	The APIs belong to different tenants.	This operation is not allowed.
403	APIG.3412	The API provider has been frozen.	The API provider has been frozen.	Contact technical support.
403	APIG.3414	The VPC channel is already being used by another API.	The VPC channel is already being used by another API.	Delete the API associated with the VPC channel and then delete the VPC channel.

Status Code	Error Codes	Error Message	Description	Solution
403	APIG.3415	The API group cannot be deleted because it contains APIs.	The API group cannot be deleted because it contains APIs.	Delete the APIs in the API group and then delete the API group.
403	APIG.3416	The API cannot be deleted because it has been published.	The API cannot be deleted because it has been published.	Take the API offline and then delete it.
403	APIG.3418	The environment contains published APIs.	The environment contains published APIs.	This operation is not allowed.
403	APIG.3420	The API group is no longer available on the marketplace.	The API group is no longer available on the marketplace.	Check whether the API group has been listed on the marketplace.
403	APIG.3447	The access control policy cannot be deleted because it has been bound to APIs.	The access control policy cannot be deleted because it has been bound to APIs.	Delete the APIs bound with the access control policy and then delete the access control policy.
403	APIG.3451	The request throttling policy cannot be deleted because it has been bound to APIs.	The request throttling policy cannot be deleted because it has been bound to APIs.	Delete the APIs bound with the request throttling policy and then delete the request throttling policy.
403	APIG.3471	The operation cannot be performed on this type of VPC channel.	The operation cannot be performed on this type of VPC channel.	This operation is not allowed.

Status Code	Error Codes	Error Message	Description	Solution
403	APIG.3472	The load balancer is already being used by another VPC channel.	The load balancer is already being used by another VPC channel.	Unbind the load balancer from the VPC channel.
403	APIG.3473	The load balancer has already been bound to another endpoint service.	The load balancer has already been bound to another endpoint service.	This operation is not allowed.
403	APIG.3474	The API group ID in the URL does not match the API group to which the URL domain has been bound.	The API group ID in the URL does not match the API group to which the URL domain has been bound.	Change the API group specified in the URL to the API group associated with the domain name.
404	APIC.7301	Instance spec not found	Instance spec not found	Use a valid instance spec.
404	APIC.7302	Instance not found	Instance not found	Check whether the instance exists and use a valid instance ID.
404	APIC.7307	The security group does not exist in the VPC.	The security group does not exist in the VPC.	Use an existing security group.
404	APIC.7310	The region does not have any AZs.	The region does not have any AZs.	Use another region.
404	APIC.7311	The NAT EIP does not exist in the VPC.	The NAT EIP does not exist in the VPC.	Use an existing NAT EIP.
404	APIC.7314	The VPC Endpoint of the gateway does not exist.	The VPC Endpoint of the gateway does not exist.	Contact technical support to check the VPC Endpoint.

Status Code	Error Codes	Error Message	Description	Solution
404	APIG.3001	The API group does not exist	The API group does not exist	Check whether the API group exists.
404	APIG.3002	The API does not exist.	The API does not exist.	Check whether the API exists.
404	APIG.3003	The environment does not exist.	The environment does not exist.	Check whether the environment exists.
404	APIG.3004	The app does not exist.	The app does not exist.	Check whether the app exists.
404	APIG.3005	The request throttling policy does not exist.	The request throttling policy does not exist.	Check whether the request throttling policy exists.
404	APIG.3006	The access control policy does not exist.	The access control policy does not exist.	Check whether the access control policy exists.
404	APIG.3007	The configuration does not exist.	The configuration does not exist.	Check whether the configuration exists.
404	APIG.3008	The excluded configuration does not exist.	The excluded configuration does not exist.	Check whether the excluded configuration exists.
404	APIG.3009	The app authorization record does not exist.	The app authorization record does not exist.	Check whether the app authorization record exists.
404	APIG.3010	The access control policy binding record does not exist.	The access control policy binding record does not exist.	Check whether the access control policy binding record exists.
404	APIG.3011	The environment variable does not exist.	The environment variable does not exist.	Check whether the environment variable exists.

Status Code	Error Codes	Error Message	Description	Solution
404	APIG.3012	The request throttling policy binding record does not exist.	The request throttling policy binding record does not exist.	Check whether the request throttling policy binding record exists.
404	APIG.3013	The excluded request throttling configuration does not exist.	The excluded request throttling configuration does not exist.	Check whether the excluded request throttling configuration exists.
404	APIG.3014	The pre-subscription record does not exist.	The pre-subscription record does not exist.	Check whether the purchasing record exists.
404	APIG.3015	The API publication record does not exist.	The API publication record does not exist.	Check whether the API publication record exists.
404	APIG.3016	The API group listing information does not exist.	The API group listing information does not exist.	Check whether the API group has been listed on the marketplace.
404	APIG.3017	The signature key does not exist.	The signature key does not exist.	Check whether the signature key exists.
404	APIG.3018	The signature key binding record does not exist.	The signature key binding record does not exist.	Check whether the signature key binding record exists.
404	APIG.3019	The function URN does not exist.	The function URN does not exist.	Check whether the function URN exists.
404	APIG.3020	The URL domain does not exist.	The URL domain does not exist.	Check whether the domain name exists.
404	APIG.3021	The SSL certificate does not exist.	The SSL certificate does not exist.	Check whether the SSL certificate exists.

Status Code	Error Codes	Error Message	Description	Solution
404	APIG.3022	The API version does not exist.	The API version does not exist.	Check whether the API version exists.
404	APIG.3023	The VPC channel does not exist.	The VPC channel does not exist.	Check whether the VPC channel exists.
404	APIG.3024	The cloud server does not exist.	The cloud server does not exist.	Check whether the cloud server exists in the VPC channel.
404	APIG.3025	The certificate does not exist.	The certificate does not exist.	Check whether the certificate exists.
404	APIG.3030	The instance does not exist.	The instance does not exist.	Check whether the instance exists.
404	APIG.3081	The authorizer does not exist.	The authorizer does not exist.	Check whether the custom authorizer exists.
404	APIG.3082	The AppCode does not exist.	The AppCode does not exist.	Check whether the AppCode exists.
404	APIG.3087	The feature configuration does not exist.	The feature configuration does not exist.	Check whether the feature configuration exists.
404	APIG.3090	The API Swagger file does not exist.	The API Swagger file does not exist.	Check whether the Swagger file exists.
404	APIG.3092	The ECS does not exist.	The ECS does not exist.	The ECS has already been deleted, or the ECS ID is incorrect.
404	APIG.3094	Instance task does not exist.	Instance task does not exist.	Instance task is deleted or task ID is invalid.

Status Code	Error Codes	Error Message	Description	Solution
404	APIG.3095	The orchestrations does not exist	The orchestrations does not exist	Check whether the orchestration rule corresponding to orchestration_id in the request parameter exists.
404	APIG.3097	The binding record of this SSL certificate and domain name does not exist.	The binding record of this SSL certificate and domain name does not exist.	Check whether the binding record exists.
409	APIC.7701	Instance status conflict.	Instance status conflict.	Try again after the gateway upgrade is complete.
409	APIC.7707	Scaling up to the same specifications is not allowed.	Scaling up to the same specifications is not allowed.	Scale up to other specifications.
409	APIC.7709	Public network access is enabled for the gateway.	Public network access is enabled for the gateway.	Disable public network access and try again.
409	APIC.7710	ELB is available only when the instance is in the Available state.	ELB is available only when the instance is in the Available state.	Contact technical support to restore the gateway status to Running, and try again.
409	APIC.7711	Public inbound access is enabled for the instance	Public inbound access is enabled for the instance.	Disable public inbound access and try again.
409	APIC.7712	The gateway operation has already been locked.	The gateway operation has already been locked.	Pay the order.

Status Code	Error Codes	Error Message	Description	Solution
409	APIG.1149	No permission for this instance task.	No permission for this instance task.	Use a token of the correct project.
409	APIG.3491	The default response cannot be deleted.	The default response cannot be deleted.	This operation is not allowed.
409	APIG.3492	The default response name cannot be modified.	The default response name cannot be modified.	This operation is not allowed.
409	APIG.3707	Only published APIs can be bound with plug-ins.	Only published APIs can be bound with plug-ins.	Publish the API and try again.
409	APIG.3708	The key usage of the certificate does not match	The key usage of the certificate does not match	Use matched key usage
409	APIG.3709	The signature algorithm of the certificate does not match	The signature algorithm of the certificate does not match	Change signature algorithm type
409	APIG.3711	A configuration parameter can be modified only once per minute.	A configuration parameter can be modified only once per minute.	Try again after 1 minute.
409	APIG.3712	User domain does not match.	User domain does not match.	Check the domain info.
409	APIG.3716	The orchestration rule is currently in use by another API.	The orchestration rule is currently in use by another API.	Unbind the orchestration rule from the API.

Status Code	Error Codes	Error Message	Description	Solution
412	APIG.3458	The feature is not supported by the current instance.	The feature is not supported by the current instance.	Contact technical support.
412	APIG.3713	orchestration_mapped_param cannot be modified.	orchestration_mapped_param cannot be modified.	Do not modify orchestration_mapped_param.
412	APIG.3714	The backend request protocol does not support SM cryptographic algorithms.	The backend request protocol does not support SM cryptographic algorithms.	Change the protocol to HTTPS.
500	APIC.7253	Internal configuration error.	Internal configuration error.	Check the internal configuration.
500	APIC.9000	Failed to request internal service	Failed to request internal service	Contact technical support to view the background logs.
500	APIC.9005	Order creation failed.	Order creation failed.	Contact technical support to view background logs related to CBC.
500	APIC.9007	Failed to access VPCEP	Failed to access VPCEP	Contact technical support to view logs related to VPCEP.
500	APIC.9100	Failed to access the database.	Failed to access the database.	Contact technical support to view background logs related to the database.
500	APIC.9200	Failed to query AZ information.	Failed to query AZ information.	Contact technical support to view the background logs.
500	APIC.9204	Failed to bind the EIP.	Failed to bind the EIP.	Contact technical support to view the background logs.

Status Code	Error Codes	Error Message	Description	Solution
500	APIC.9209	Failed to access EPS.	Failed to access EPS.	Contact technical support to view logs related to EPS.
500	APIC.9999	System error. Contact technical support.	System error. Contact technical support.	Contact technical support to view background logs of the management plane and locate the fault.
500	APIG.1029	PDP5 cannot be connected.	PDP5 cannot be connected.	Check the PDP5 connection.
500	APIG.3500	Failed to synchronize data to etcd.	Failed to synchronize data to etcd.	Contact technical support.
500	APIG.9002	Invalid function URN.	Invalid function URN.	Use a valid function URN.
500	APIG.9003	Statistics Center request failed.	Statistics Center request failed.	Contact technical support.
500	APIG.9004	IAM request failed.	IAM request failed.	Contact technical support.
500	APIG.9005	VPC request failed.	VPC request failed.	Contact technical support.
500	APIG.9006	DNS request failed.	DNS request failed.	Contact technical support.
500	APIG.9007	ELB request failed.	ELB request failed.	Contact technical support.
500	APIG.9008	Too many requests. Try again later.	Too many requests. Try again later.	Please try again later.
500	APIG.9013	Synchronize CCMS data failed	Synchronize CCMS data failed	Contact technical support.
500	APIG.9999	Internal Server Error	Internal Server Error	Contact technical support.

A.5 Supported Features

The following table lists the features that are supported by **dedicated gateways**.

 **NOTE**

If the gateway you use does not have specific features, contact technical support to upgrade your gateway.

Feature Name	Feature Description	Configurable	Feature Configuration Example	Configuration Parameter	Parameter Description	Default Value	Value Range
lts	Reporting of Shubho access logs	Yes	{"name": "lts", "enable": true, "config": {"group_id": "\", \"topic_id\": \"\", \"log_group\": \"\", \"log_stream\": \"\"}}"	group_id	Log group ID.	-	-
				topic_id	Log stream ID.		
				log_group	Name of a log group.		
				log_stream	Name of a log stream.		
gateway_responses	Custom gateway responses	No	-	-	-	-	-

Feature Name	Feature Description	Configurable	Feature Configuration Example	Configuration Parameter	Parameter Description	Default Value	Value Range
ratelimit	Request throttling limit configuration	Yes	<pre>{"name": "ratelimit", "enable": true, "config": {"api_limits": 500}}</pre>	api_limits	Default request throttling value applied to all APIs. Set this parameter properly to meet service requirements. A small value may constantly throttle your services.	200 calls per second	1–1,000,000 calls per second
request_body_size	Configuration of the maximum request body size	Yes	<pre>{"name": "request_body_size", "enable": true, "config": "104857600"}</pre>	request_body_size	Maximum size of the body allowed in an API request.	12 MB	1–9536 MB
backend_timeout	Maximum backend timeout configuration	Yes	<pre>{"name": "backend_timeout", "enable": true, "config": {"max_timeout": 500}}</pre>	max_timeout	Maximum timeout for APIG to request a backend service.	60,000 ms	1–600,000 ms

Feature Name	Feature Description	Configurable	Feature Configuration Example	Configuration Parameter	Parameter Description	Default Value	Value Range
app_token	app_token authentication	Yes	{"name": "app_token", "enable": true, "config": {"enable": "on", "app_token_expire_time": 3600, "app_token_uri": "/v1/apigw/oauth2/token", "refresh_token_expire_time": 7200}}	enable	Whether to enable this feature.	Off	On/Off
				app_token_expire_time	Validity period of the access token.	3600s	1-72,000s
				refresh_token_expire_time	Validity period of the refresh token.	7200s	1-72,000s
				app_token_uri	URI used for obtaining the token.	/v1/apigw/oauth2/token	-
				app_token_key	Token encryption key.	-	-
app_api_key	app_api_key authentication	Yes	{"name": "app_api_key", "enable": true, "config": "on"}	-	-	Off	On/Off
app_basic	app_basic authentication	Yes	{"name": "app_basic", "enable": true, "config": "on"}	-	-	Off	On/Off

Feature Name	Feature Description	Configurable	Feature Configuration Example	Configuration Parameter	Parameter Description	Default Value	Value Range
app_secret	app_secret authentication	Yes	{"name": "app_secret", "enable": true, "config": "on"}	-	-	Off	On/Off
app_jwt	app_jwt authentication	Yes	{"name": "app_jwt", "enable": true, "config": {"enable": "on", "auth_header": "Authorization"}}	enable	Whether to enable app_jwt authentication.	Off	On/Off
				auth_header	app_jwt authentication header.	Authorization	-
public_key	Public_key backend signatures	Yes	{"name": "public_key", "enable": true, "config": {"enable": "on", "public_key_uri_prefix": "/apigw/authadv/v2/public-key/"}}	enable	Whether to enable public_key authentication.	Off	On/Off
				public_key_uri_prefix	URI prefix used for obtaining the public key.	/apigw/authadv/v2/public-key/	-

Feature Name	Feature Description	Configurable	Feature Configuration Example	Configuration Parameter	Parameter Description	Default Value	Value Range
backend_token_allow	Allowing tenants to transparently transmit tokens to the backend	Yes	<pre>{"name": "backend_token_allow", "enable": true, "config": [{"backend_token_allow_users": [{"user_name": ""}]}}</pre>	backend_token_allow_users	Regular expression for transparently transmitting the token to the common tenant whitelist of the tenant to match the domain name of the common tenant.	-	-
sign_basic	Basic signature keys	No	-	-	-	-	-
multi_auth	Two-factor authentication	No	-	-	-	-	-

Feature Name	Feature Description	Configurable	Feature Configuration Example	Configuration Parameter	Parameter Description	Default Value	Value Range
backend_client_certificate	Backend two-way authentication	Yes	{"name": "backend_client_certificate", "enable": true, "config": {"enable": "on", "ca": "\", "content": "\\", "key": "\\"}}}	enable	Whether to enable this feature.	Off	On/Off
				ca	CA file of two-way authentication.	-	-
				content	Two-way authentication file.	-	-
				key	Private key of two-way authentication.	-	-

Feature Name	Feature Description	Configurable	Feature Configuration Example	Configuration Parameter	Parameter Description	Default Value	Value Range
ssl_ciphers	HTTP S cipher suites	Yes	<pre>{ "name": "ssl_ciphers", "enable": true, "config": "config" }</pre> <pre>{ "\ssl_ciphers\": ["\ECDHE-ECDSA-AES256-GCM-SHA384"] }</pre>	ssl_ciphers	Encryption and decryption suites supported. The ssl_ciphers parameter cannot be left blank and can contain only the options in the default value.	-	ECDHE-ECDSA-AES256-GCM-SHA384, ECDHE-RSA-AES256-GCM-SHA384, ECDHE-ECDSA-AES128-GCM-SHA256, ECDHE-RSA-AES128-GCM-SHA256, ECDHE-ECDSA-AES256-SHA384, ECDHE-RSA-AES256-SHA384, ECDHE-ECDSA-AES128-SHA256, ECDHE-RSA-AES128-SHA256
route	Custom routes	No	-	-	-	-	-
cors	Plugins	No	-	-	-	-	-

Feature Name	Feature Description	Configurable	Feature Configuration Example	Configuration Parameter	Parameter Description	Default Value	Value Range
real_ip_from_xff	X-Forwarded-For header for identifying IP addresses during access control and request throttling	Yes	<pre>{ "name": "real_ip_from_xff", "enable": true, "config": { "enable": "on", "xff_index": -1 } }</pre>	enable	Whether to enable this feature.	Off	On/Off

Feature Name	Feature Description	Configurable	Feature Configuration Example	Configuration Parameter	Parameter Description	Default Value	Value Range
				xff_index	Sequence number of an IP address in the X-Forwarded-For header. The value of this parameter can be 0 or a positive or negative number. If the value is 0 or a positive number, the IP address of the corresponding index is obtained from the X-Forwarded-For header. If the value is a negative number, the IP address in reverse index order is obtained from the	-1	Valid Int32 value

Feature Name	Feature Description	Configurable	Feature Configuration Example	Configuration Parameter	Parameter Description	Default Value	Value Range
					<p>X-Forwarded-For header. For example, assume that the X-Forwarded-For header of a request received by API gateway contains three IP addresses: IP1, IP2, and IP3. If the value of xff_index is 0, IP1 is obtained. If the value of xff_index is 1, IP2 is obtained. If the value of xff_index is -1, IP3 is obtained.</p>		

Feature Name	Feature Description	Configurable	Feature Configuration Example	Configuration Parameter	Parameter Description	Default Value	Value Range
app_route	IP address access	Yes	{"name": "app_route", "enable": true, "config": "on"}	-	-	Off	On/Off
vpc_name_modifiable	Load balance channel name modification	Yes	{"name": "vpc_name_modifiable", "enable": true, "config": "on"}	-	-	on	On/Off
default_group_host_trustlist	Access to the DEFAULT group from IP addresses that are not inbound access addresses of the current gateway	Yes	{"name": "default_group_host_trustlist", "enable": true, "config": "{ \"enable\": \"on\", \"hosts\": [\"123.2.2\", \"202.2.2\"] }"}	enable	Whether to enable this feature.	-	On/Off
				hosts	IP addresses that are not inbound access addresses of the current gateway.	-	-

Feature Name	Feature Description	Configurable	Feature Configuration Example	Configuration Parameter	Parameter Description	Default Value	Value Range
throttle_strategy	Whether to enable request throttling.	Yes	{"name": "throttle_strategy", "enable": true, "config": {"enable": "\on", "strategy": "\local"}}	enable	Whether to enable this feature.	Off	On/Off
				strategy	Request throttling mode.	-	cluster/local
custom_log	Printing custom request headers, query strings, and cookies in logs	Yes	{"name": "custom_log", "enable": true, "config": {"custom_logs": [{"location": "\header", "name": "\a1234"}]}}	custom_logs	Custom logs.	-	Max. 10 items.
				location	Location.		header/query/cookie
				name	Name.		-

Feature Name	Feature Description	Configurable	Feature Configuration Example	Configuration Parameter	Parameter Description	Default Value	Value Range
real_ip_header_getter	Using a custom header to obtain source IP addresses	Yes	{"name": "real_ip_header_getter", "enable": true, "config": {"enable": "on"}, "header_getter": "header:testIP"}}	enable	Whether to enable this feature.	Off	On/Off
				header_getter	Custom header for obtaining source IP addresses.	-	-
policy_cookie_param	Using cookies in backend policy conditions	Yes	{"name": "policy_cookie_param", "enable": true, "config": "on"}	-	-	Off	On/Off
app_quota	Client quotas	No	-	-	-	-	-
app_acl	Request throttling policies	No	-	-	-	-	-
set_resp_headers	Response header management plugins	No	-	-	-	-	-

Feature Name	Feature Description	Configurable	Feature Configuration Example	Configuration Parameter	Parameter Description	Default Value	Value Range
vpc_backup	Primary/Standby VPC channels	No	-	-	-	-	-
sign_aes	AES signature keys	No	-	-	-	-	-
kafka_log	Adding, deleting, modifying, and querying Kafka log push plugins	No	-	-	-	-	-
backend_retry_count	Backend retry configuration	No	-	-	-	-	-
policy_sys_param	Using system parameters in backend policy conditions	No	-	-	-	-	-

Feature Name	Feature Description	Configurable	Feature Configuration Example	Configuration Parameter	Parameter Description	Default Value	Value Range
breaker	Circuit breakers	No	-	-	-	-	-
content_type_configurable	Returning request parameter type (Content-Type) when querying APIs	No	-	-	-	-	-
rate_limit_plugin	Request throttling plugins	No	-	-	-	-	-
breakerv2	Circuit breakers for degrading services in case of overload	No	-	-	-	-	-

Feature Name	Feature Description	Configurable	Feature Configuration Example	Configuration Parameter	Parameter Description	Default Value	Value Range
sm_cipher_type	Encrypting local sensitive data with commercial cryptographic algorithms	No	-	-	-	-	-
rate_limit_algorithm	Request throttling algorithm switch over	No	-	-	-	-	-

A.6 Obtaining a Project ID

Calling an API

You can also obtain a project ID by calling the IAM API used to query project information.

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

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

```
{
  "projects": [
    {
      "domain_id": "65382450e8f64ac0870cd180d14e684b",
      "is_domain": false,
      "parent_id": "65382450e8f64ac0870cd180d14e684b",
      "name": "xx-north-4",
      "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"
}
}
```

Obtaining a Project ID on the Console

A project ID needs to be specified in the URLs of some APIs. Therefore, you need to obtain a project ID before calling such APIs. To obtain a project ID, perform the following operations:

1. Log in to the management console.
2. Hover the mouse pointer over the username and choose **My Credentials** from the drop-down list.

On the **My Credentials** page, view project IDs in the project list.

If there are multiple projects in one region, expand **Region** and view subproject IDs in the **Project ID** column.

A.7 Obtaining an Account Name and Account ID

An account name and account ID are required for some URLs when an API is called. To obtain an account name and account ID, perform the following operations:

1. Log in to the management console.
2. Hover the mouse pointer over the username and choose **My Credentials** from the drop-down list.

View the account name and account ID.

B Change History

Table B-1 Change history

Released On	Description
2023-12-19	This issue is the first official release.