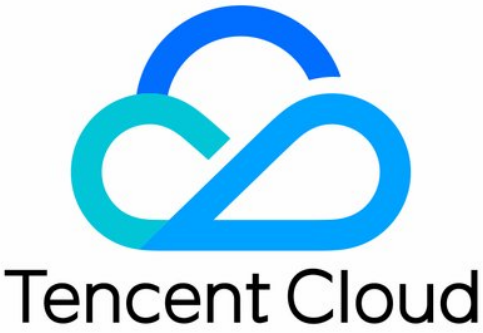
Getting Started

Product Introduction



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Getting Started
Create Service

Last updated：2018-09-27 11:26:14

1. Log in to Tencent Cloud Console, and select **API Gateway**.

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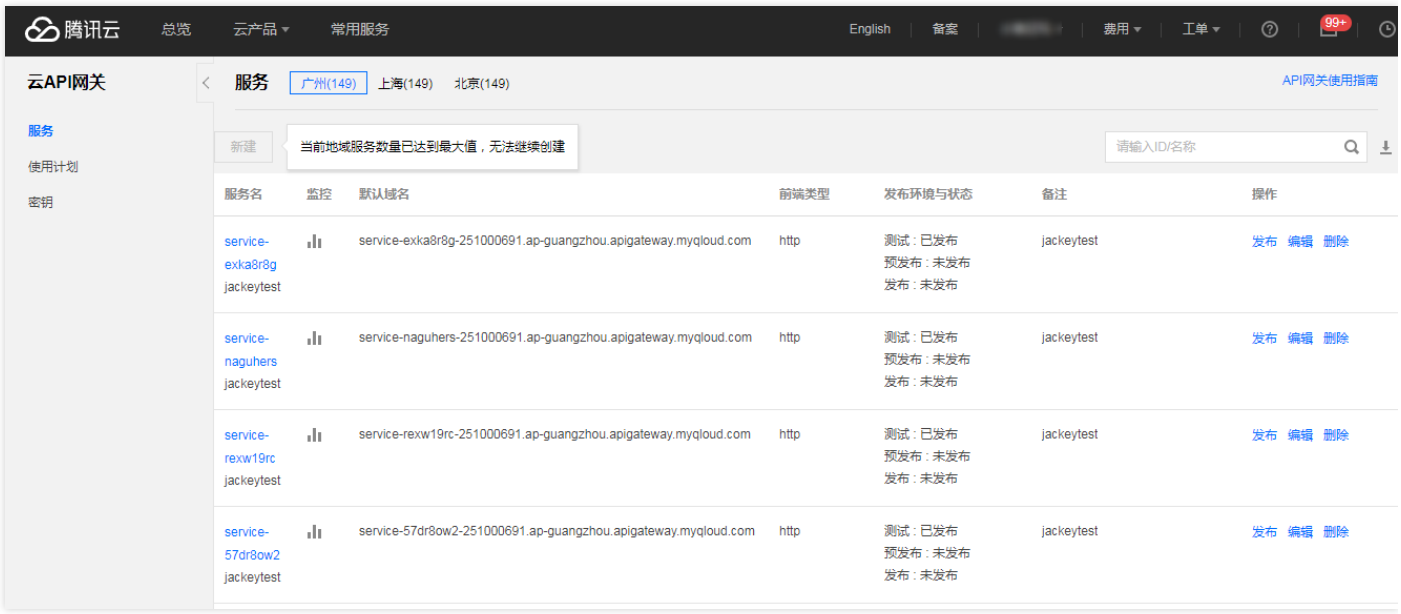
2. On the Service tab, select the current region, and click **New**.



Note: If the number of services in the current region has reached the upper limit, no more services can be created.

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3. Enter the service name and remarks, and select the frontend type (HTTP, HTTPS, HTTP and HTTPS).

Note: A service name only contains a maximum of 50 characters comprised of a-z, A-Z, 0-9, and _.

4. Click **Submit** to complete the service creation. And you can go to the API Management page to create an API.

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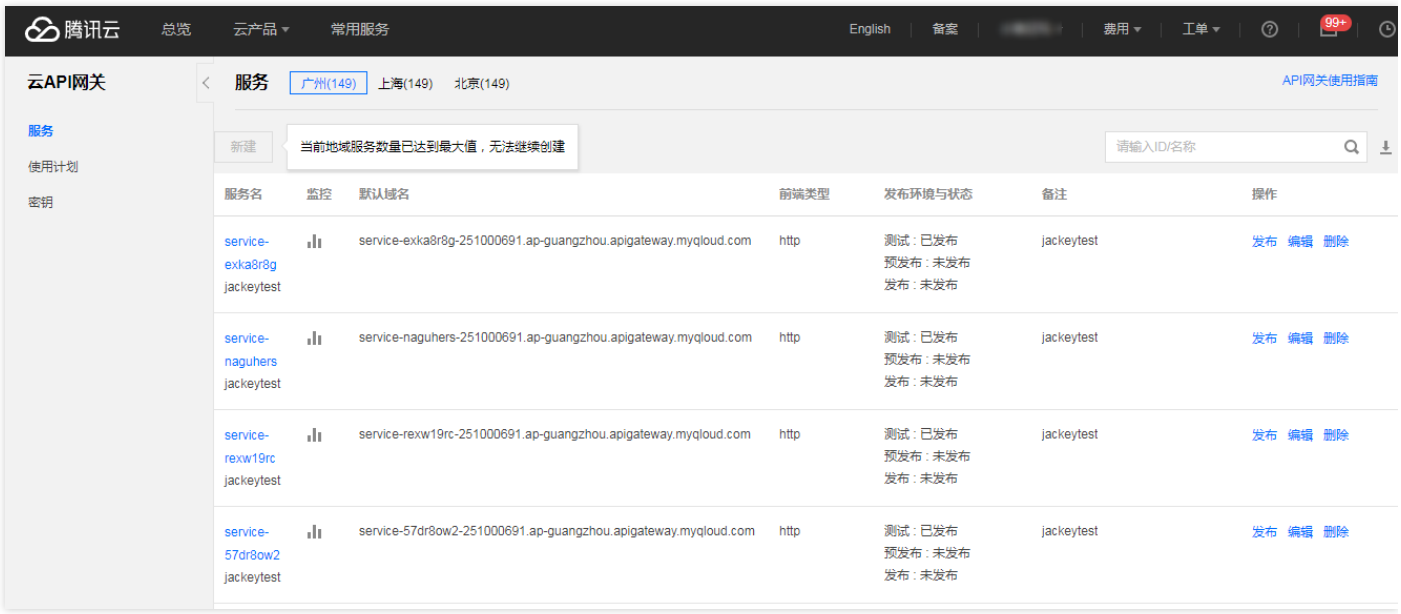
Edit Service

Last updated：2018-09-27 11:29:19

1. Select the service to be edited in the service list on the service page, and click **Edit**.



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2. Enter the editing contents and click **Finish**.

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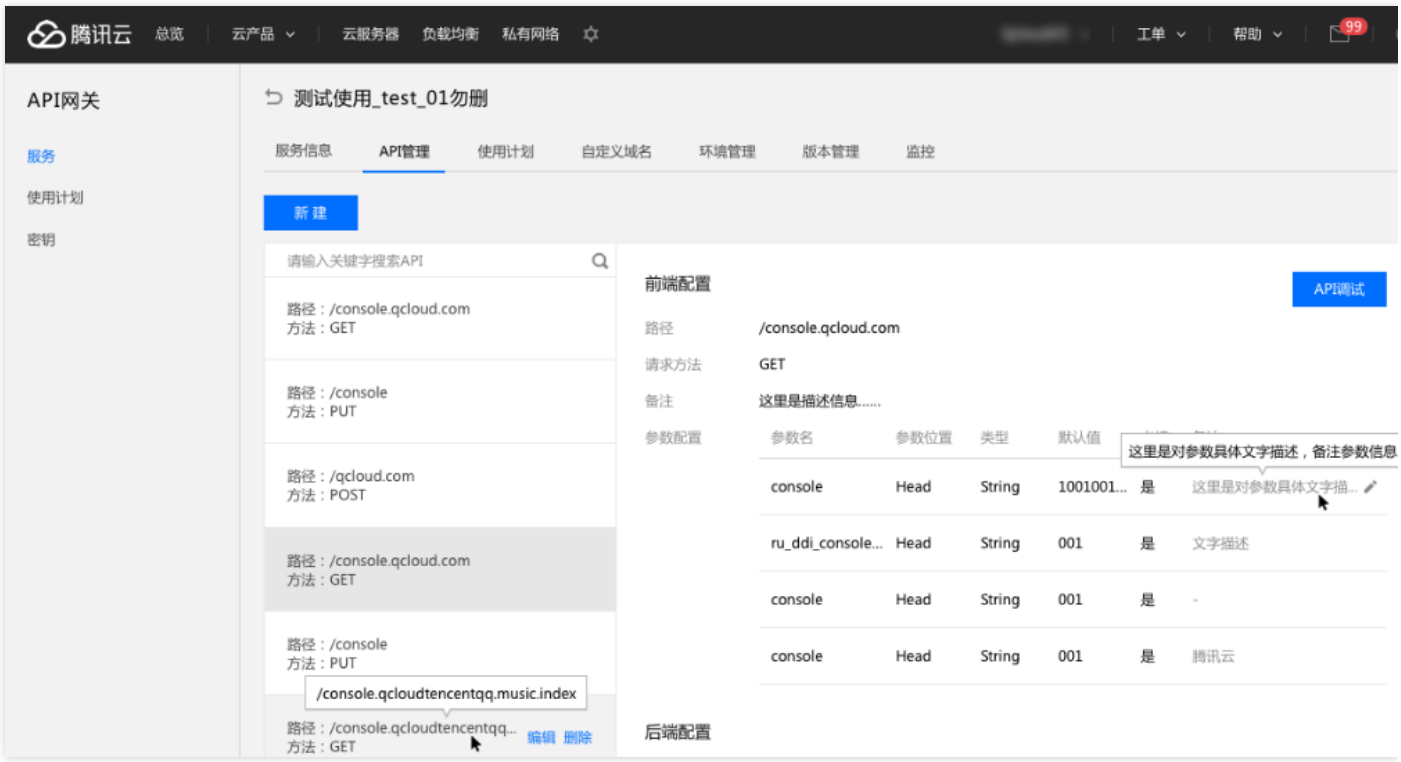
Create API

Last updated：2018-09-27 11:17:28

1. On the API Management tab of the Service page, click **New**.



2. Perform frontend configurations and backend configurations.

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Configure Frontend

Last updated：2018-09-27 11:22:24

In API Frontend Configuration, you can configure the API frontend information, such as the API request method and API parameters.
Configuration instructions:
(1) Configure the path to be opened, such as `/path`. If parameters need to be carried in the path, use the "{parameter name}" method, such as `/path/{key}`.

(2) Select your request method: GET, POST, PUT, DELETE or HEAD.

(3) If "No Authentication" is selected, the API gateway will pass the authentication and the bound usage plan will also take effect when receiving an anonymous request.

(4) Enter remarks (optional).

(5) Enter the input configuration of your API according to the prompt.

After the API frontend information is configured, click **Next** to carry out the API backend configuration.

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Configure Backend

Last updated：2018-09-27 11:25:03

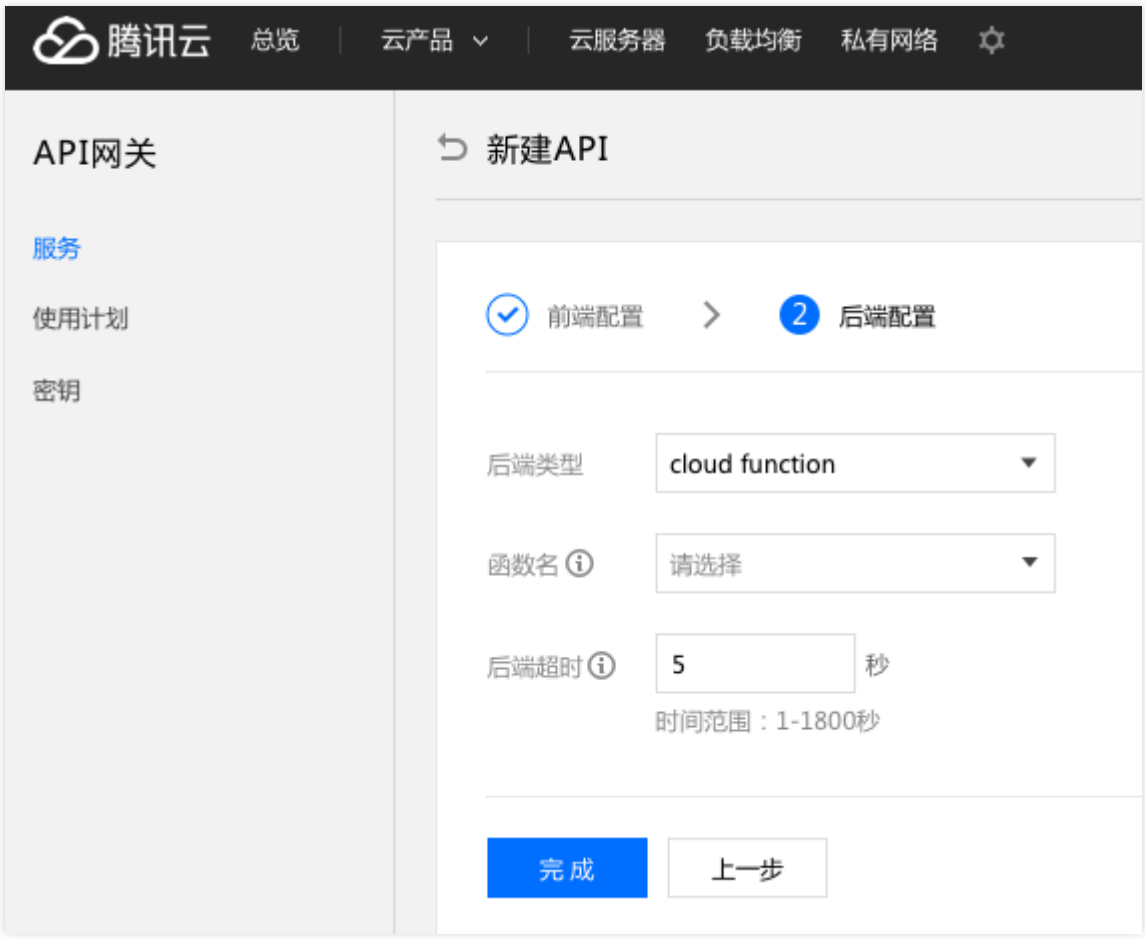
Integrating Serverless Cloud Function

If you do not enable the response integration (current usage mode) for requests from API Gateway to SCF, the request information will be assembled with a fixed structure when API Gateway sends the request to SCF. SCF receives this fixed structure. The returned result will be passed through without any processing.

Configuration instructions:

1. When you integrate an SCF with the backend, configure the functions you created on the SCF.

2. Configure the timeout, and click **Finish**.



If you enable the response for requests from API Gateway to SCF, API Gateway will assemble the request with a fixed structure when sending it to the SCF, and the SCF also returns a fixed structure. Then API

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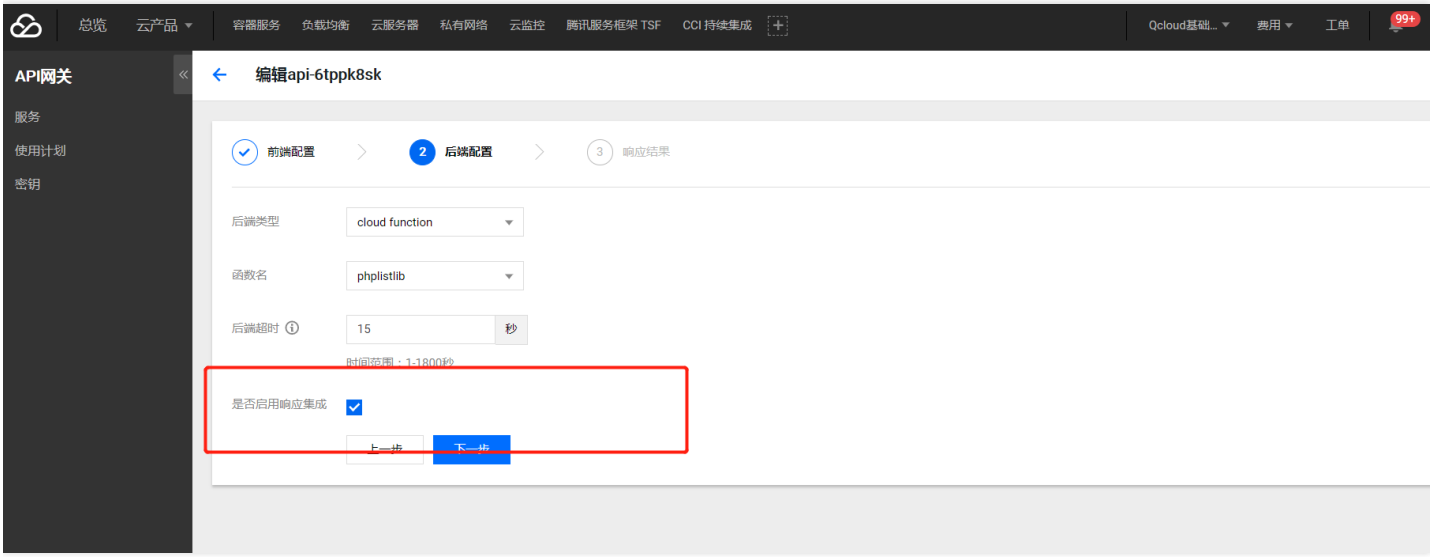
Gateway maps the result returned by the SCF to such locations as statusCode, header and body before returning the result to the client.



In this case, you must return data in the following format to API Gateway for parsing:

```
{ "isBase64Encoded": true|false,
"statusCode": httpStatusCode,
"headers": { "headerName": "headerValue", ... },
"body": "..."
}
```

The structure format of requests from API Gateway to SCF is as follows:

```
{

"requestContext": {
"serviceId": "123456",
"path": "/{proxy+}",
"method": "POST",
"requestId": "c6af9ac6-7b61-11e6-9a41-93e8deadbeef",
"identity": {
"secretId": "abdcdxxxxxxxsdfs",
"sourceIp": "10.0.2.14"
},
"sourceIp": "10.0.2.14",
"stage": "prod"
},

"headers": {
"Accept-Language": "en-US,en;q=0.8",
```

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```
"Accept": "text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8",
"Host": "1234567890.execute-api.us-east-1.amazonaws.com",
"User-Agent": "Custom User Agent String"
},
"body": "{\"test\":\"body\"}",

"pathParameters": {
"proxy": "path/to/resource"
},
"queryStringParameters": {
"foo": "bar"
},
"headerParameters":{
"Refer": "10.0.2.14"
},

"stageVariables": {
"baz": "qux"
},

"path": "/path/to/call"
"method": "POST",
}
```

Integrating HTTP

If your business is deployed in another Cloud or in your local server and is open with HTTP, select the HTTP integration for the backend.
Configuration instructions:

1. To integrate HTTP, you must select HTTP or HTTPS for Backend Type.

2. Enter the backend address, which starts with `http://` or `https://` and does not include the path behind, such as `http://api.myservice.com` or `http://108.160.162.30` .

3. Enter the backend path starting with /, such as `/path` or `/path/{petid}` .

4. Select the request method. The request methods for the frontend and the backend can be different.

5. Set the backend timeout.

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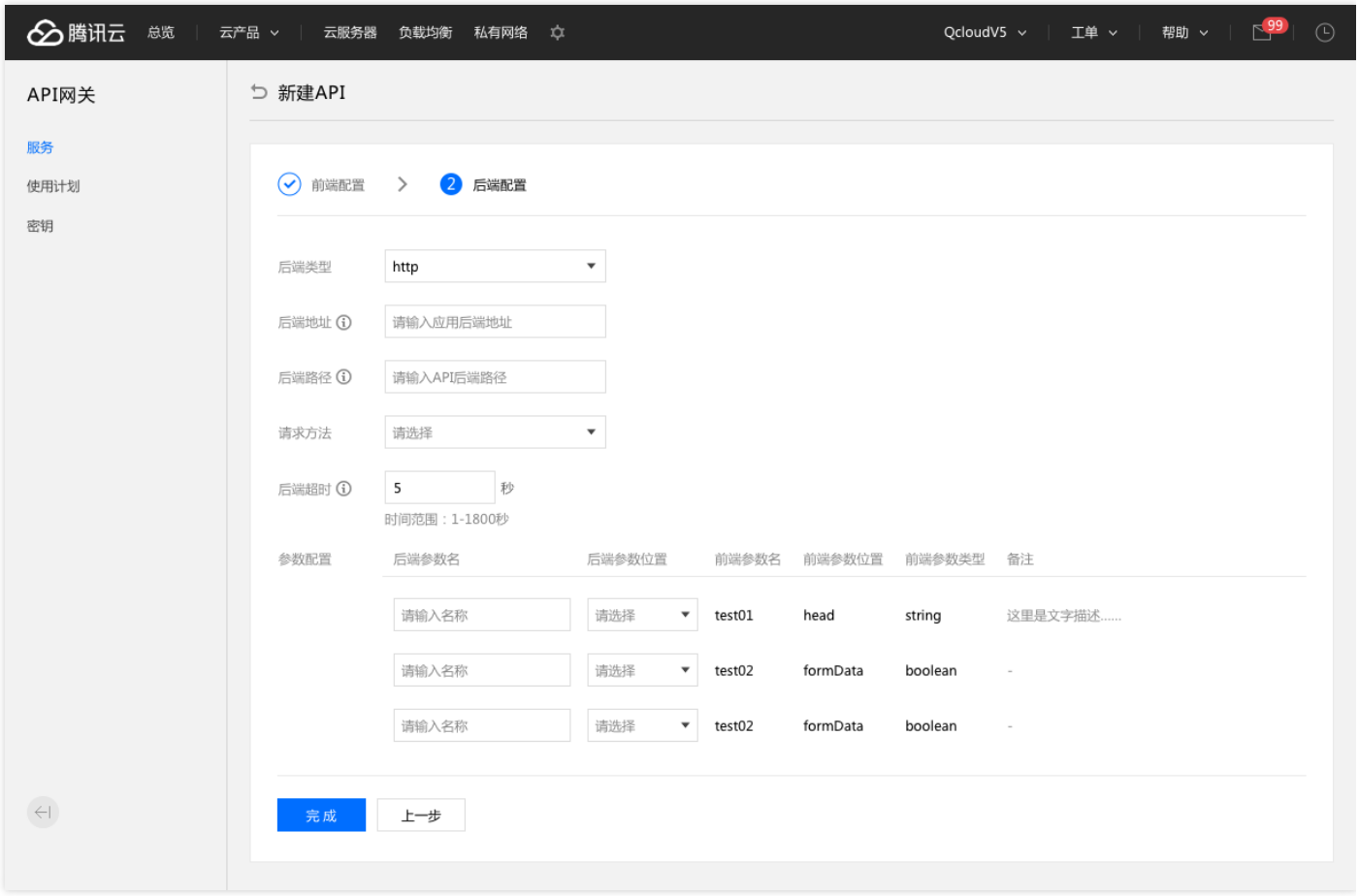
6. Set the backend parameters that map the frontend.

7. Click **Finish**.



API Gateway backend integrates CLB resources in a VPC

When you want to integrate the backend with CLB in a VPC, the frontend configuration is the same as other API configuration methods, and the backend configuration method is as follows:

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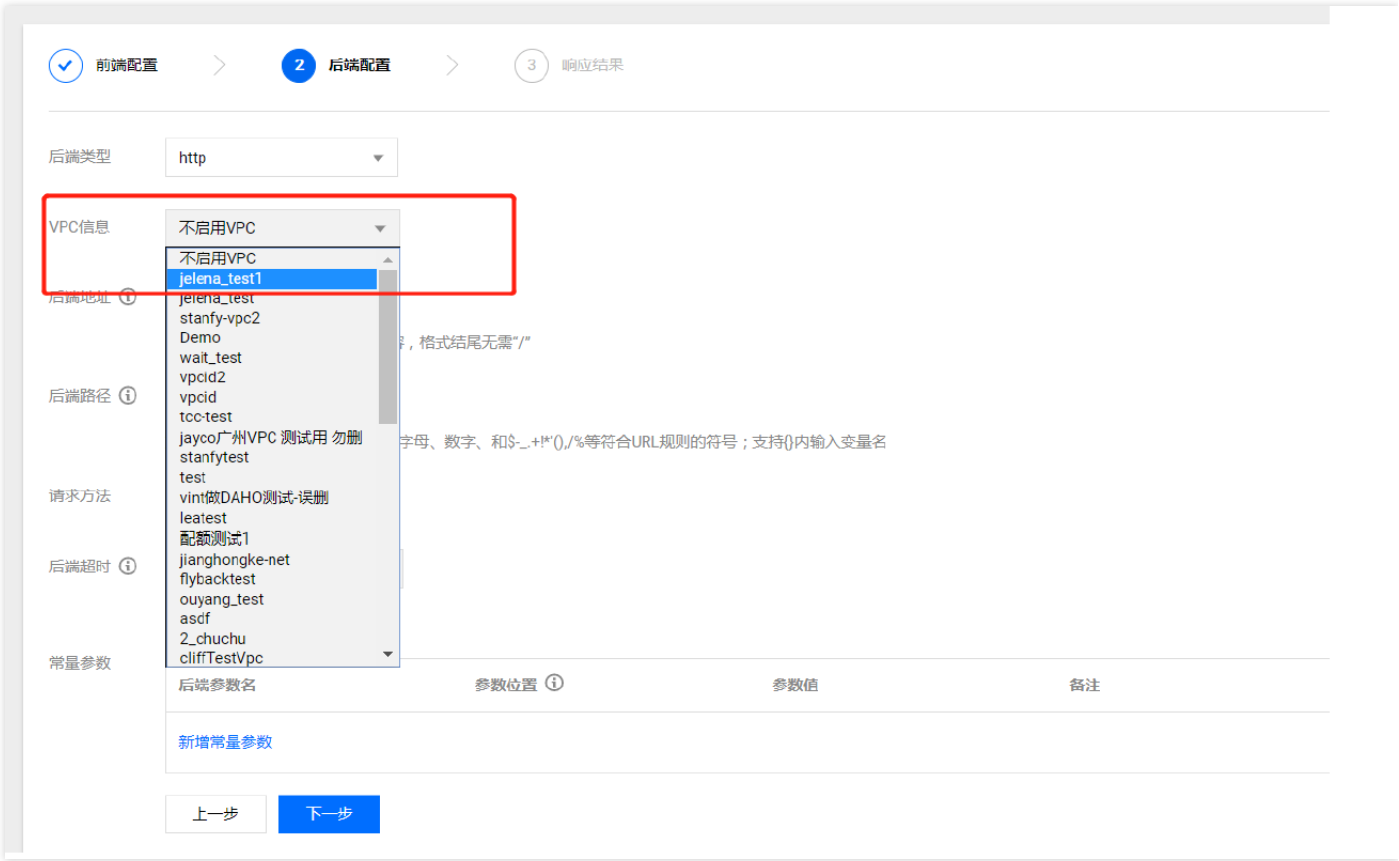
1. In the backend configuration, select the VPC to be integrated.



2. Select CLB in the VPC. API Gateway only supports integrating CLB in a VPC. Other cloud resources in the VPC will be supported soon.

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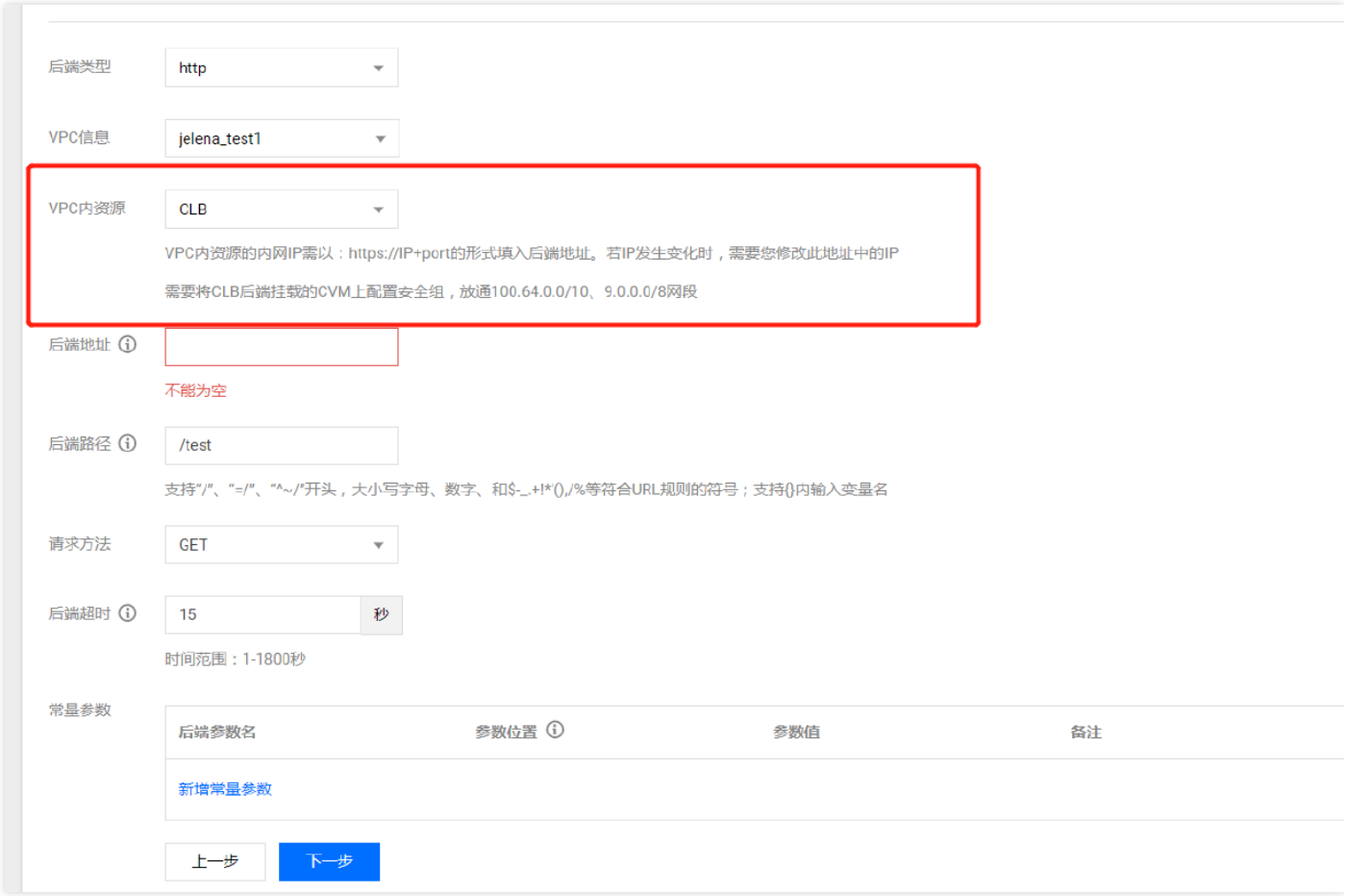

3. Enter `http://vip+port` or `https://vip+port` at the backend address. The requests we send to CLB will be HTTP requests or HTTPS requests depending on the content you entered. The VIP is that of CLB, which

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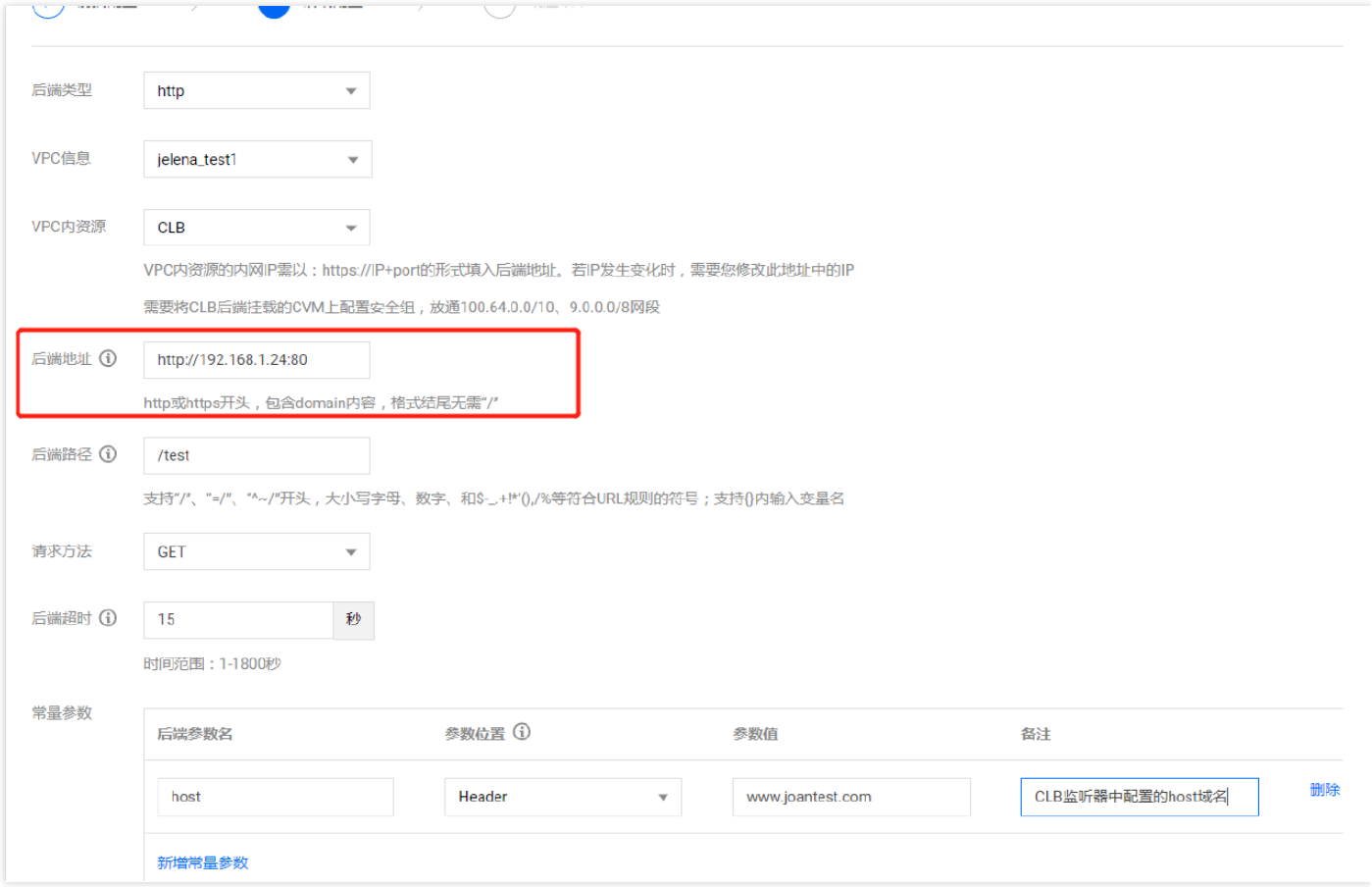
can be found in the basic information of application-based private network CLB.



4. Select a listening type.

If you select the CLB listening type of HTTP/HTTPS, you must configure the backend path as the path configured in the CLB listener.

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The following figure shows the domain name and path configured in the CLB listener:

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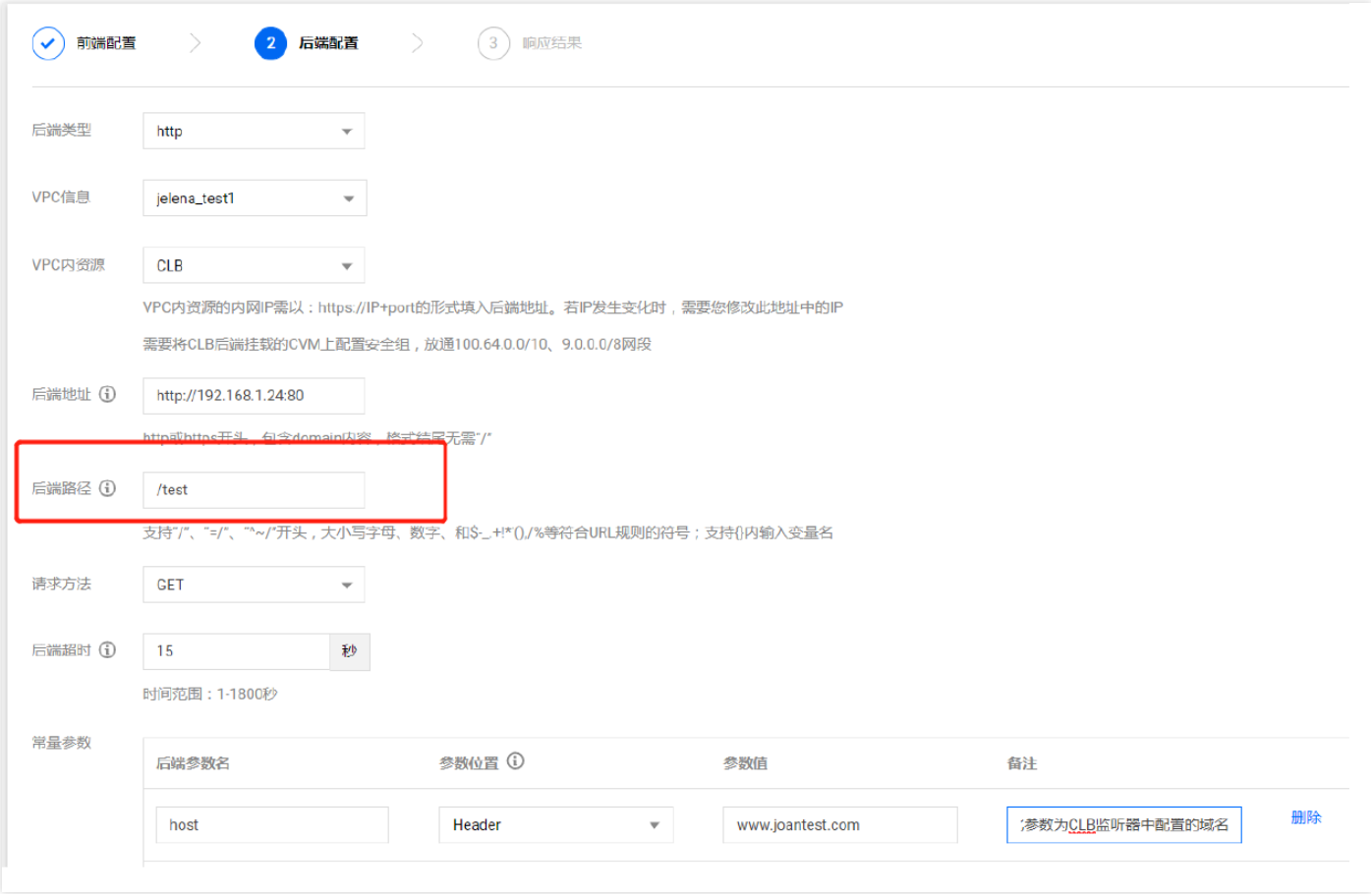
The following shows the backend path in API Gateway, which must be consistent with that in CLB.



You also need to configure the parameter host as the constant parameter and place it in the header. The parameter value is the domain name configured in the CLB listener.

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If you select the CLB listening type of TCP/UDP, you must configure the backend path as the path required by the business in the CVM mounted on the CLB.

If you configure the host verification in the CVM, you need to configure the parameter host as the constant parameter, and select the address to place parameter according to your own business, just like using a layer-7 listener.

The subsequent configurations are the same as other API configurations.

> **Note:**
> When the backend integrates CLB, security groups on the CVM mounted to the backend should be open to the IP address ranges of 100.64.0.0/10 and 9.0.0.0/8.

Integrating Mock

Mock will return a response with fixed configurations for an API request. Mock is generally used for development test. It can complete the API configuration in advance and return responses when the

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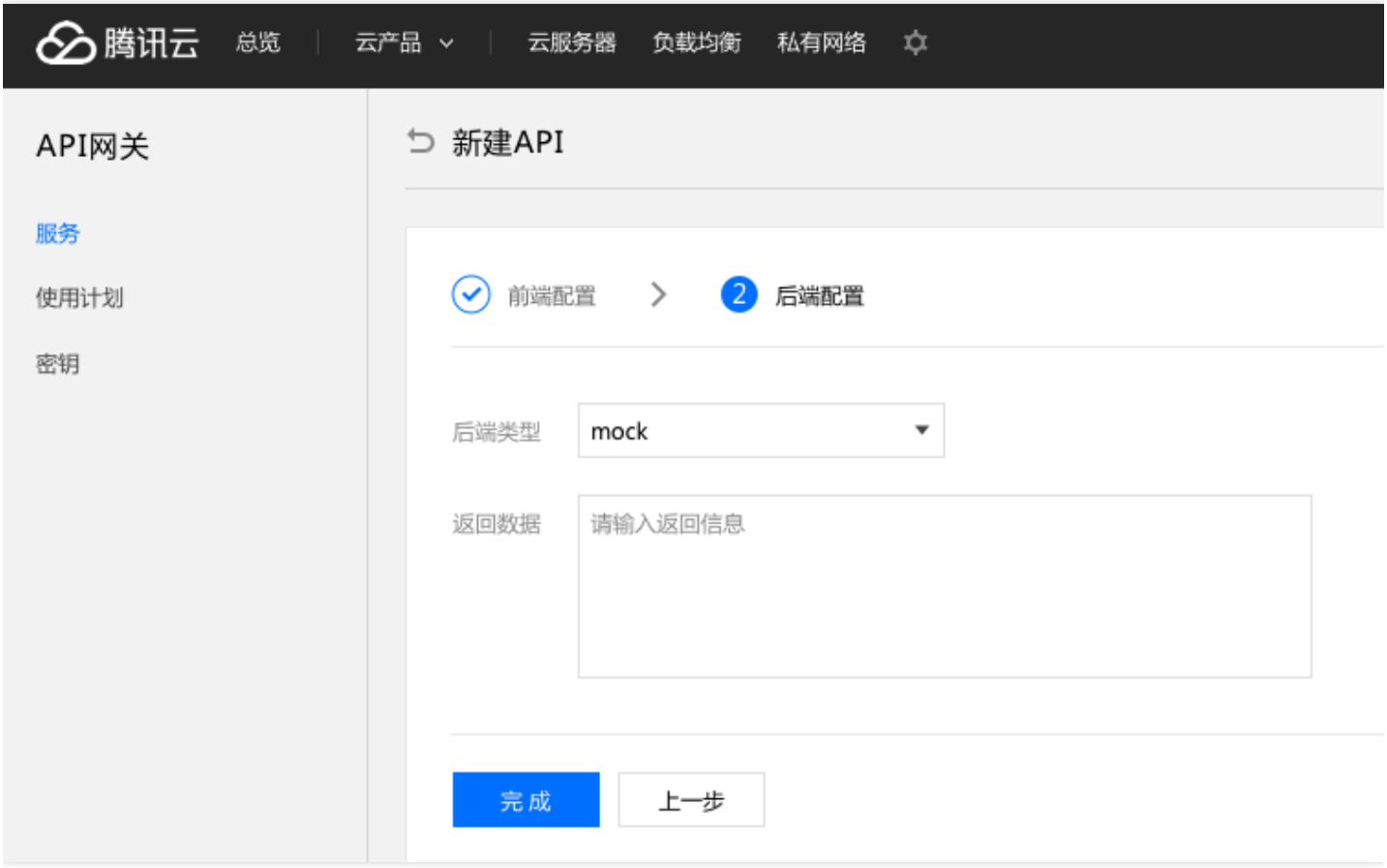
backend service is not completely developed. When integrating MOCK, you only need to configure the returned data, and click **Finish**.



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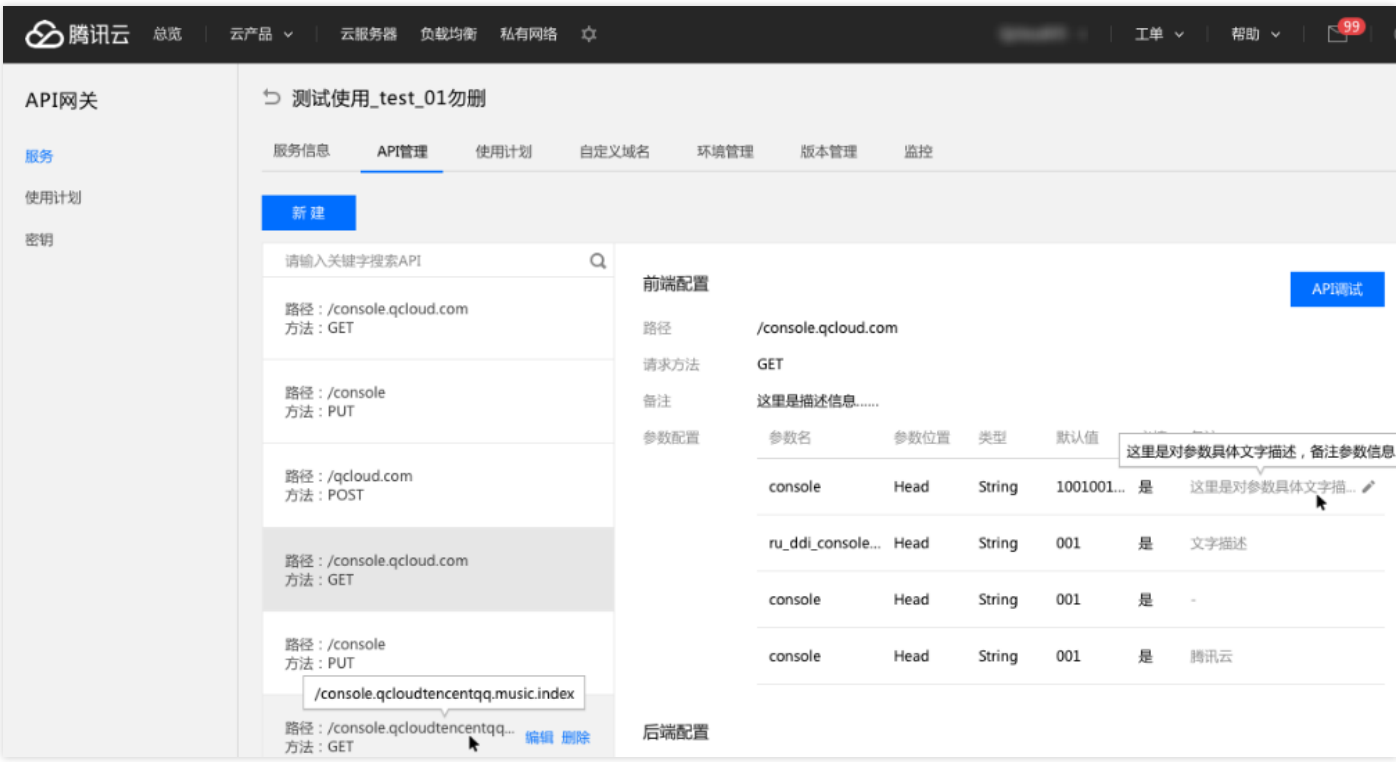
Debug API

Last updated：2018-09-27 11:16:29

After creating an API, you can debug it.

1. In the API Management tab of the Service page, select the API to be debugged and click **API Debugging** in the upper right corner to enter the Debugging page.



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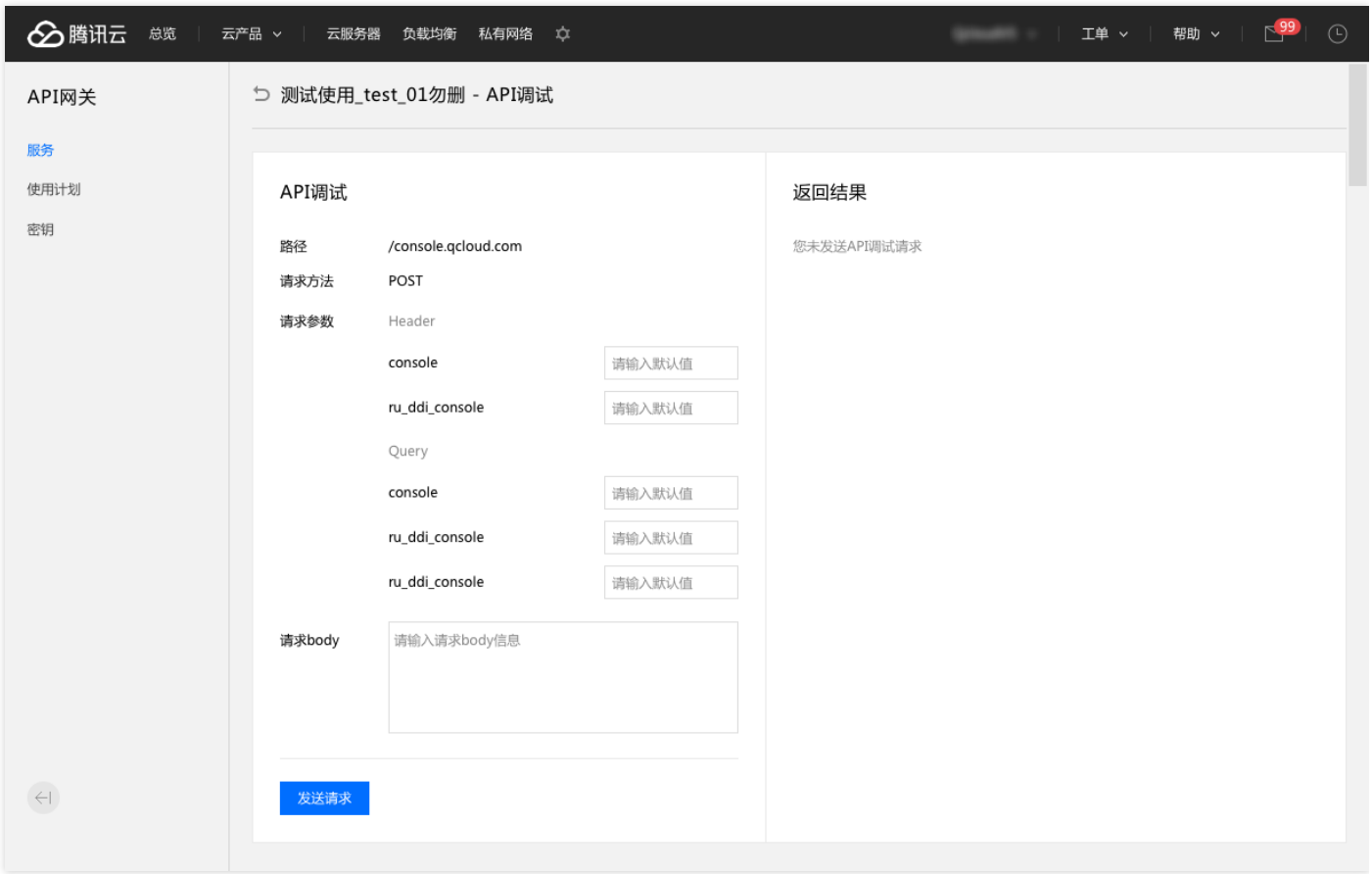
2. Enter the default parameters for API calling, and click **Send Request**.



If the parameters are optional and the user does not enter any values for the parameters, API Gateway will send a null to the backend by default.

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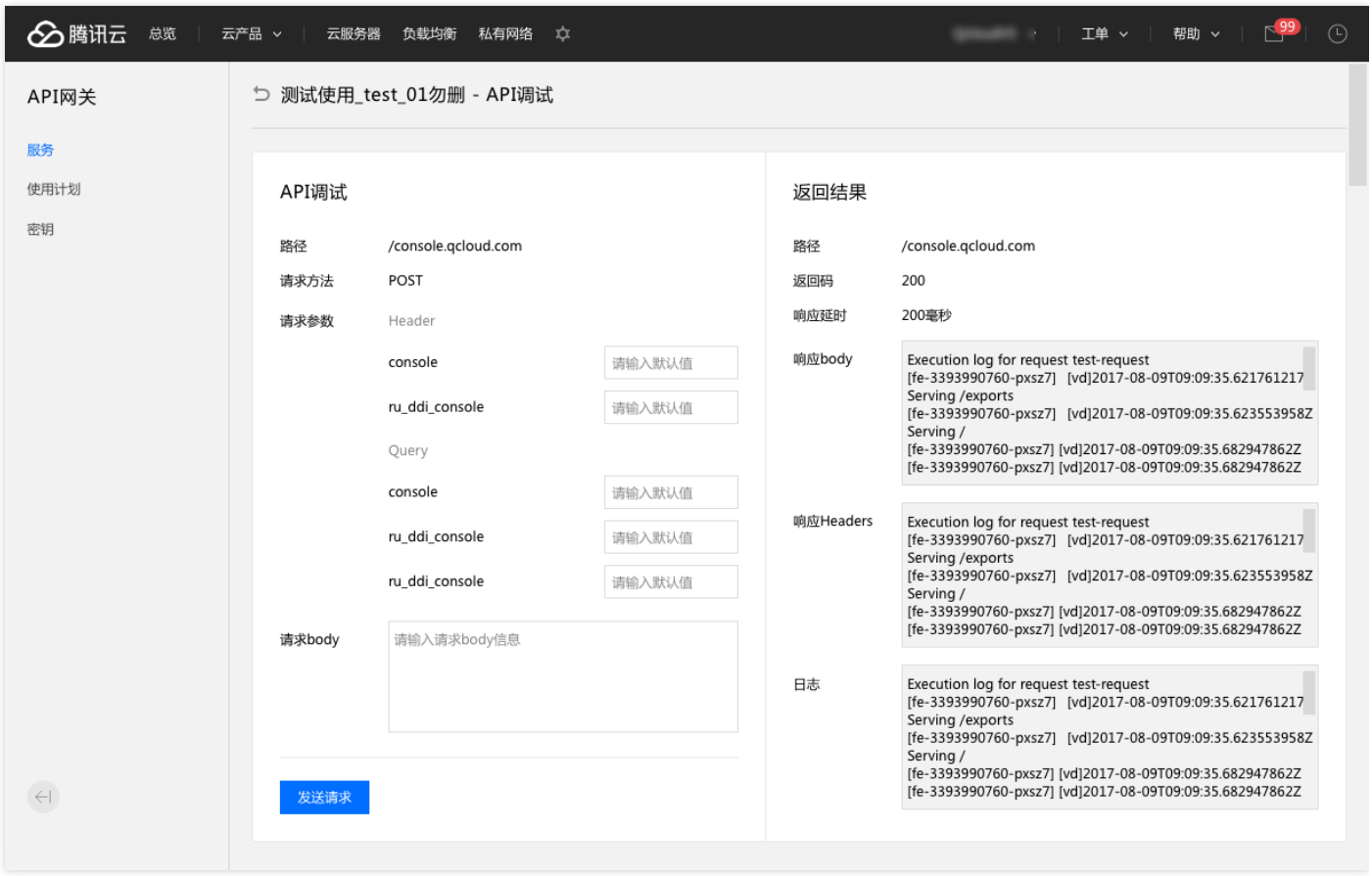
3. The returned result for API calling will be shown on the right.



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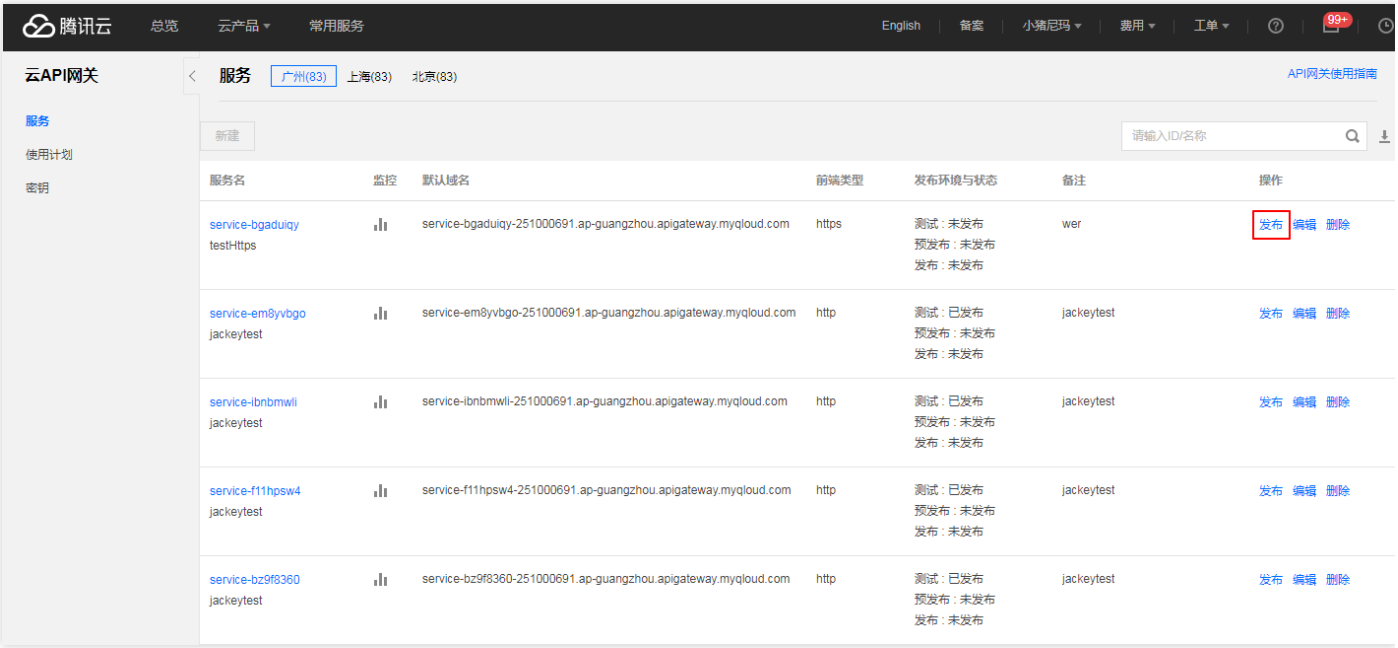
Publish and Access Service

Last updated：2018-09-27 11:28:23

Only after the service you created and the API in the service are published can the user access it.

1. Select the service to be published in the service list, and click the **Publish** button on the right.



2. Choose the environment which the service is published to. Three environments are supported: "Test", "Pre" and "Release". Click **Submit** to complete the publishing.

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Create Usage Plan and Key

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After a service is published, you must create a usage plan and a key and bind them to the service before you can call it successfully.

1. Create a pair of secret_id + secret_key.
   (1) Go to the Key tab, and click **New**.

   (2) Enter the key name, and click **Submit**.

2. Create a usage plan.
   (1) Go to the Usage Plan tab, and click **New**.

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(2) Edit the usage plan, and click **Finish**.

3. Bind the created secret_id + secret_key in the Usage Plan tab.

(1) Go to the Usage Plan tab, and select the created service.

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(2) Click **Bind Key**.

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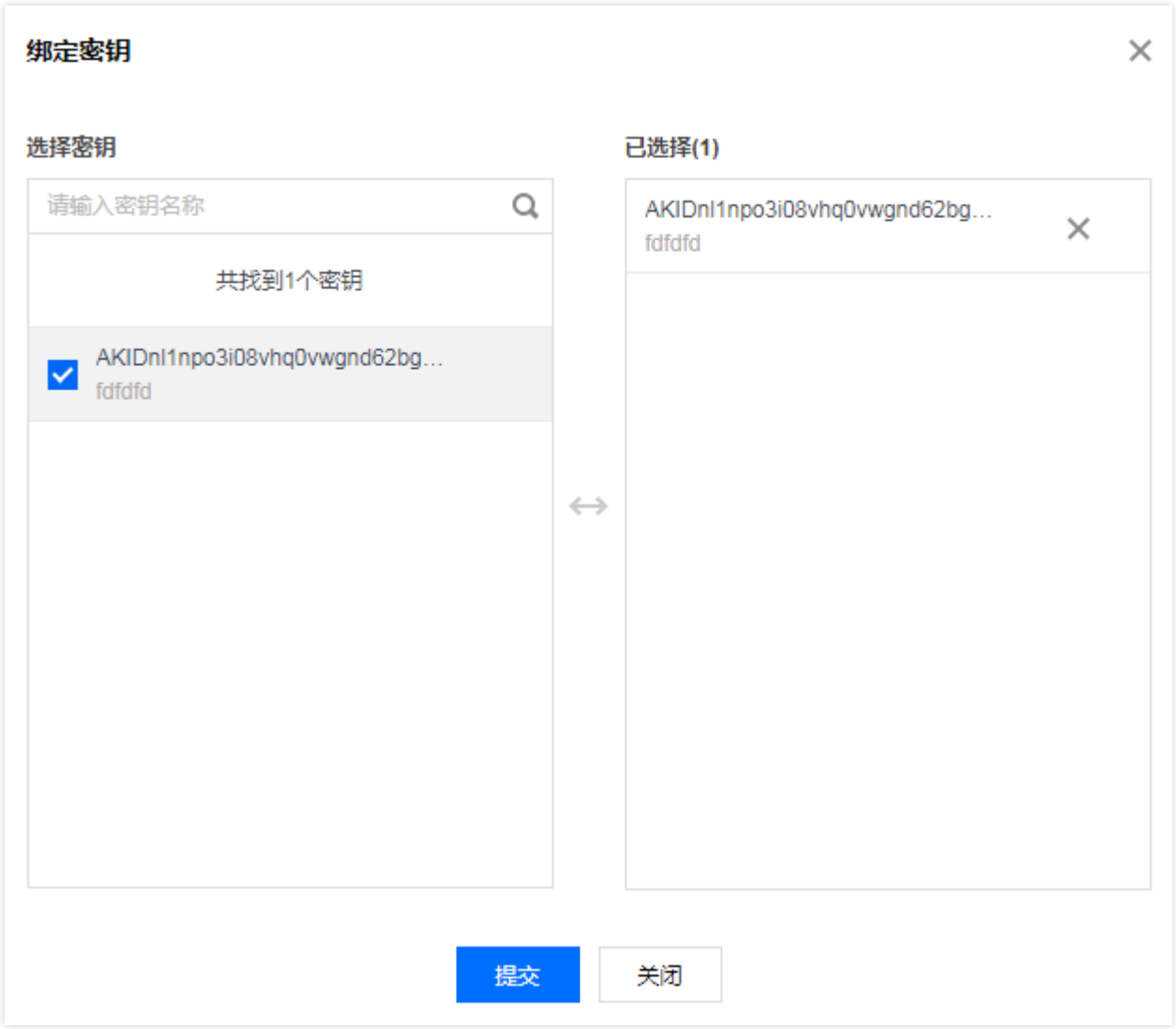
(3) Bind the created secret_id + secret_key in the Usage Plan tab, and click **Submit**.



4. Bind the usage plan to a service environment.

(1) Go to the Usage Plan tab, and select the created service.

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(2) Go to the **Bound Environment** page, and click **Bind Service Environment**.

(3) Enter the service and the environment to be bound, and click **Submit**.

Note: If two usage plans are to be bound to the same environment, the two usage plans cannot be bound to the same key.

5. After the steps above are completed, you can provide the secret_id + secret_key created in Step 1 to end users. End users can obtain the verification using the secret_id + secret_key, and then access the API published in the service via the secondary domain name of the service or by binding a private domain name.

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API Call

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You can call an API after obtaining its secret_id and secret_key and knowing the URL and required parameters.
Whether you use HTTP or HTTPS for API calling, the signature information must be included in the request header. For more information on signature calculation, see secret_id + secret_key Verification.

The steps are as follows:

Request

Address

```
http://service-kuy3rwbs-1251762227.ap-guangzhou.apigateway.myqcloud.com/release
//Enter the URL of the API service to be called
```

Method

```
POST
```

Request body

```
QueryParam_a=value1&QueryParam_b=value2
```

Request header

```
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8
Accept-Language: zh-cn
Connection: Keep-Alive
Host: service-kuy3rwbs-1251762227.ap-guangzhou.apigateway.myqcloud.com/release
User-Agent: Mozila/4.0(compatible;MSIE5.01;Window NT5.0)
Accept-Encoding: gzip,deflate
Content-Type: application/x-www-form-urlencoded;charset=utf-8
//Request body type, which is set based on the actual request body content.
X-Client-Proto: http
X-Client-Proto-Ver: HTTP/1.1
X-Real-IP: 163.177.93.244
X-Forwarded-For: 106.19.71.102, 163.177.93.244
Date: Sun, 21 Sep 2017 06:18:21 GMT
```

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```
Authorization: hmac id="AKIDCgOPWjQ6BAxvHtyckhWABJVYSBj548pN", algorithm="hmac-sha1", he
aders="Date Host", signature="630c82836582f78b90f293b2f38bda9c"
//Signature. For the specific signature method, see the key calculation method in Verification and Sec
urity.
```

Response

Response code

```
200
//Response status code. A value greater than or equal to 200 and less than 300 indicates success; a va
lue greater than or equal to 400 and less than 500 indicates a client error; a value greater than 500 in
dicates a server error.
```

Response header

```
Content-Type: text/html; charset=UTF-8
Content-Length: 122
Date: Sun, 21 Sep 2017 06:46:04 GMT
Server: squid/3.5.20
Connection: close
Set-Cookie:1P_JAR=2017-09-18-06; expires=Mon, 25-Sep-2017 06:46:04 GMT; path=/; domain=.qq.co
m
X-Secret-ID:AKIDCgOPWjQ6BAxvHtyckhWABJVYSBj548pN
//secret_id in the key pair
X-UsagePlan-ID:Q6BAxvHtyckhWABJVYSBj
//ID of the usage plan bound to the key pair
X-RateLimit-Limit:500
//The traffic limit configuration in the usage plan
X-RateLimit-Used:100/125
//The traffic usage in the usage plan
```

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Delete Service

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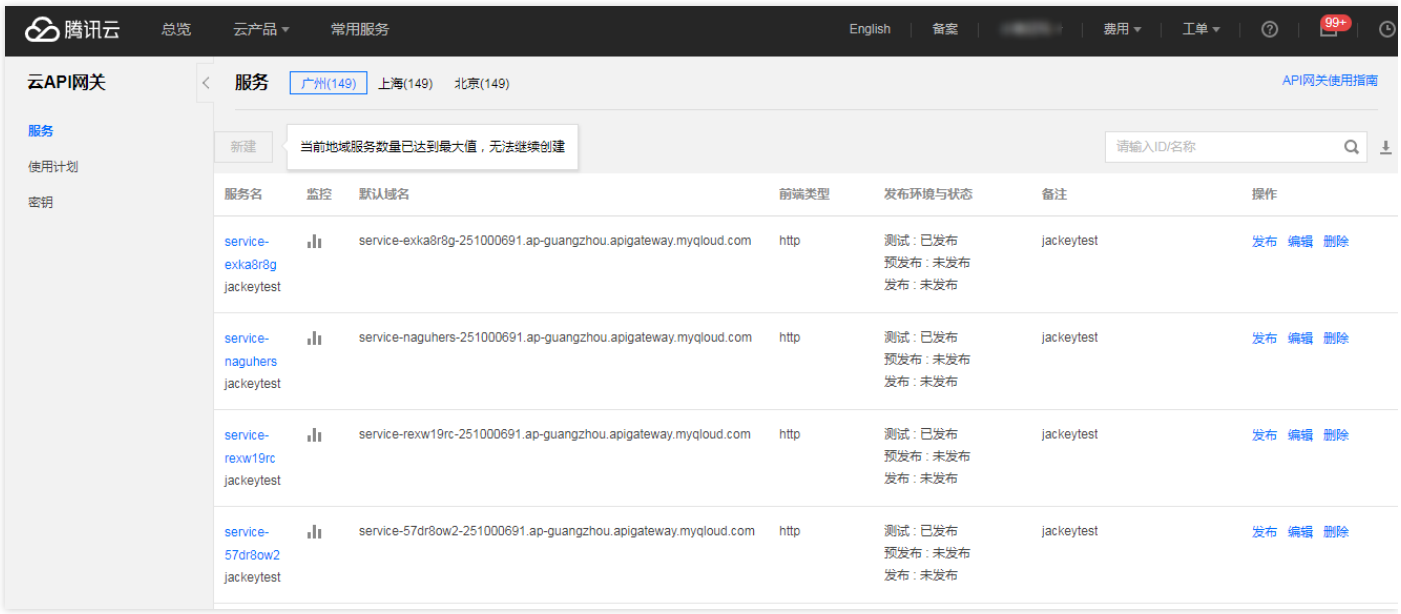
1. In the Service tab, select the task to be deleted, and click **Delete** on the far right.



2. Click **Yes**.

Note: If an API still exists in the service, the service cannot be deleted before it is removed. In addition, if there is an activated environment, the service cannot be deleted directly.

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