

# Simple Message Notification

## API Reference

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# 1 Before You Start

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## 1.1 Overview

Welcome to the *Simple Message Notification API Reference*. Simple Message Notification (SMN) is a reliable and flexible large-scale message notification service. It enables you to efficiently send messages to phone numbers, email addresses and HTTP/HTTPS servers and connect cloud services through notifications, reducing system complexity.

This document describes how to use application programming interfaces (APIs) to perform operations in SMN, such as creating, querying, deleting, and updating resources. For details about all supported operations, see [API Overview](#).

Before you use SMN by calling APIs, please get yourself familiar with basic SMN concepts. For details, see [Service Overview](#).

## 1.2 API Calling

SMN supports Representational State Transfer (REST) APIs, allowing you to call APIs using HTTPS. For details, 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 Notes and Constraints

- The number of SMN resources you can create is determined by quota. To view or increase the quota, see [Quota Adjustment](#).
- For more details, see the constraints described in each API.

## 1.5 Concepts

- **Account**

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

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

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

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

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

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

A project corresponds to a region. Default projects are defined. Users can be granted permissions in a default project to access all resources under their accounts in the region associated with the project. If you need more refined access control, create subprojects under a default project and create resources in subprojects. Then you can assign users the permissions required to access only the resources in the specific subprojects.
- **Enterprise project**

Enterprise projects group and manage resources across regions. Resources in different enterprise projects are logically isolated.

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

# 2 API Overview

By calling SMN APIs, you can use all functions provided by SMN, for example, creating a topic and adding a subscription.

**Table 2-1** API description

Category	Description
Topic operations	Create, modify, and delete topics.
Subscription operations	Query the subscription list, add and delete subscriptions.
Template operations	Create, modify, and delete message templates.
Message publishing	Publish messages in the different formats, including text, JSON, and message template.
Resource tag operations	Query resources by tag, add resource tags, and query tags.
Version querying	Query SMN API versions and information about the SMN API v2 version.

# 3 Calling APIs

## 3.1 Making an API Request

This section describes the structure of a REST API request, and uses the IAM API for **obtaining a user token** as an example to demonstrate how to call an API. The obtained token can then be used to authenticate the calling of other APIs.

### Request URI

A request URI is in the following format:

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

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

**Table 3-1** URI parameter description

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



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, <b>?limit=10</b> indicates that a maximum of 10 data records will be displayed.

For example, to obtain an IAM token in the **Dublin** region, obtain the endpoint of IAM (**iam.myhuaweicloud.eu**) for this region and the **resource-path (/v3/auth/tokens)** in the URI of the API used to **obtain a user token**. Then, construct the URI as follows:

```
https://iam.myhuaweicloud.eu/v3/auth/tokens
```

#### NOTE

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

## Request Methods

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

**Table 3-2** HTTP methods

Method	Description
GET	Requests the server to return specified resources.
PUT	Requests the server to update specified resources.
POST	Requests the server to add resources or perform special operations.
DELETE	Requests the server to delete specified resources, for example, an object.
HEAD	Same as GET except that the server must return only the response header.
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 **obtain a user token**, the request method is **POST**. The request is as follows:

```
POST https://iam.myhuaweicloud.eu/v3/auth/tokens
```

## Request Header

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

Common request header fields are as follows.

**Table 3-3** Common request header fields

Parameter	Description	Mandatory	Example Value
Host	Specifies the server domain name and port number of the resources being requested. The value can be obtained from the URL of the service API. The value is in the format of <i>Hostname:Port number</i> . If the port number is not specified, the default port is used. The default port number for <b>https</b> is <b>443</b> .	No This field is mandatory for AK/SK authentication.	code.test.com or code.test.com: 443
Content-Type	Specifies the type (or format) of the message body. The default value <b>application/json</b> is recommended. Other values of this field will be provided for specific APIs if any.	Yes	application/json
Content-Length	Specifies the length of the request body. The unit is byte.	No	3495
X-Project-Id	Specifies the project ID. Obtain the project ID by following the instructions in <a href="#">Obtaining a Project ID</a> .	No This field is mandatory for requests that use AK/SK authentication in the Dedicated Cloud (DeC) scenario or multi-project scenario.	e9993fc787d94b 6c886cbaa340f9c 0f4

Parameter	Description	Mandatory	Example Value
X-Auth-Token	<p>Specifies the user token.</p> <p>It is a response to the API for <b>obtaining a user token</b> (This is the only API that does not require authentication).</p> <p>After the request is processed, the value of <b>X-Subject-Token</b> in the response header is the token value.</p>	<p>No</p> <p>This field is mandatory for token authentication.</p>	<p>The following is part of an example token:</p> <p>MIIPAgYJKoZlhvc NAQcCo...ggg1B BIINPXsidG9rZ</p>

#### NOTE

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

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

The 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.myhuaweicloud.eu/v3/auth/tokens
Content-Type: application/json
```

## (Optional) Request Body

This part is optional. 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 **obtain a user token**, the request parameters and parameter description can be obtained from the API request. The following provides an example request with a body included. Replace *username*, *domainname*, *\*\*\*\*\** (login password), and *xxxxxxxxxxxxxxxxxxxx* (project name) with the actual values. Obtain a project name from Regions and Endpoints.

#### NOTE

The **scope** parameter specifies where a token takes effect. You can set **scope** to an account or a project under an account. In the following example, the token takes effect only for the resources in a specified project. For more information about this API, see [Obtaining a User Token](#).

```
POST https://iam.myhuaweicloud.eu/v3/auth/tokens
Content-Type: application/json
```

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

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

## 3.2 Authentication

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

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

### Token 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. You can obtain a token by calling the [Obtaining User Token](#) API.

A cloud service can be deployed as either a project-level service or global service.

- For a project-level service, you need to obtain a project-level token. When you call the API, set **auth.scope** in the request body to **project**.
- For a global service, you need to obtain a global token. When you call the API, set **auth.scope** in the request body to **domain**.

IMS is a project-level service. When you call the API, set **auth.scope** in the request body to **project**.

```
{
  "auth": {
```

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

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

```
POST https://iam.myhuaweicloud.eu/v3/auth/projects
Content-Type: application/json
X-Auth-Token: ABCDEFJ....
```

## AK/SK Authentication

### NOTE

AK/SK authentication supports API requests with a body not larger than 12 MB. For API requests with a larger body, token authentication is recommended.

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

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

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

### NOTE

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

## 3.3 Response

### Status Code

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

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

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

### Response Header

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

**Figure 3-1** shows the response header fields for the API used to [obtain a user token](#). The **x-subject-token** header field is the desired user token. This token can then be used to authenticate the calling of other APIs.

**Figure 3-1** Header fields of the response to the request for obtaining a user token

```
connection → keep-alive
content-type → application/json
date → Tue, 12 Feb 2019 06:52:13 GMT
server → Web Server
strict-transport-security → max-age=31536000; includeSubdomains;
transfer-encoding → chunked
via → proxy A
x-content-type-options → nosniff
x-download-options → noopen
x-frame-options → SAMEORIGIN
x-iam-trace-id → 218d45ab-d674-4995-af3a-2d0255ba41b5
x-subject-token
→ MIIVXQVJKoZiHvcNAQcCoIIYJCCEoCAQExDTALBglghkgBZQMEAgEwgharBgkqhkiG9w0BBwGgghacBIIWmHsidG9rZW4iOnsiZXhwaXJlc19hdCI6ijlwMTktMDItMTNUMC
fj3KIs6YgKnpVNRbW2eZ5eb78SZOkqjACgkklQ01wi4JlGzrpd18LGXK5tdfq4lqHCYb8P4NaY0NYejcAgzJVeFYtLWT1GSO0zxKZmlQHQj82HBqHdglZO9fuEbL5dMhdavj+33wEl
xHRC9I87o+k9-
j+CMZSEB7bUGd5Uj6eRASXI1jipPEGA270g1FruooL6jqglFkNPQuFSOUB+uSsttVwRtNfsC+qTp22Rkd5MCqFGQ8LcuUx3a+9CMBnOintWW7oeRUVhVpxk8pxiX1wTEboX-
RzT6MUbvpvGw-oPNFYxJECKnoH3HRozv0vN--n5d6Nbxg==
x-xss-protection → 1; mode=block;
```

### (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 [obtain a user token](#).

```
{
  "token": {
```

```
"expires_at": "2019-02-13T06:52:13.855000Z",  
"methods": [  
  "password"  
],  
"catalog": [  
  {  
    "endpoints": [  
      {  
        "region_id": "az-01",  
.....
```

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 format of message is error",  
  "error_code": "AS.0001"  
}
```

In the response body, **error\_code** is an error code, and **error\_msg** provides information about the error.

# 4 Getting Started

## Scenarios

This topic describes how to publish a message to a topic by calling APIs.

For details about how to call APIs, see [Calling APIs](#).

### NOTE

The token obtained from IAM is valid for only 24 hours. If you want to use one token for authentication, you can cache it to avoid frequently calling the IAM API.

## Involved APIs

If you use a token for authentication, you must obtain the token and add **X-Auth-Token** to the request header of the API when making a call.

- IAM API to obtain a token
- SMN API to create a topic
- SMN API to add subscriptions
- SMN API to publish messages

## Procedure

1. Obtain the token by referring to [Authentication](#).
2. Send a request **POST** `https://{SMN_Endpoint}/v2/{project_id}/notifications/topics` to create a topic.

- a. Add **X-Auth-Token** to the request header.
- b. Specify the following parameters in the request body:

```
{
  "name": "test_topic_v2", //(Mandatory) Topic name
  "display_name": "test" //(Optional) Display name
}
```

If the request is successful, a request ID (**request\_id**) and topic URN (**topic\_urn**) are returned.

If the request fails, an error code and error message are returned. For details, see [Error Codes](#).

3. Send request **POST** `https://{SMN_Endpoint}/v2/{project_id}/notifications/topics/{topic_urn}/subscriptions` to add subscriptions.



Set **topic\_urn** based on the response in [2.b](#).

- a. Add **X-Auth-Token** to the request header.
- b. Specify the following parameters in the request body:

```
{  
  "protocol": "email", //(Mandatory) Subscription protocol  
  "endpoint": "xxx@xx.com", //(Mandatory) Email address  
  "remark": "Subscription" //(Optional) Description  
}
```

If the request is successful, a request ID (**request\_id**) and subscription URN (**subscription\_urn**) are returned.

If the request fails, an error code and error message are returned. For details, see [Error Codes](#).

 **NOTE**

You can add multiple subscriptions to a topic. For details, see .

- c. The subscription endpoint receives a confirmation message, and you must confirm the subscription in the email.
4. Send request **POST** [https://{SMN\\_Endpoint}/v2/{project\\_id}/notifications/topics/{topic\\_urn}/publish](https://{SMN_Endpoint}/v2/{project_id}/notifications/topics/{topic_urn}/publish).

- a. Add **X-Auth-Token** to the request header.
- b. Specify the following parameters in the request body:

```
{  
  "subject": "test message v2", //(Optional) Message subject, which is displayed in email messages  
  "message": "Message test message v2." //(Mandatory) Message to be published  
}
```

If the request is successful, a request ID (**request\_id**) and message ID (**message\_id**) are returned.

If the request fails, an error code and error message are returned. For details, see [Error Codes](#).

 **NOTE**

Only confirmed subscription endpoints can receive the message you publish.

# 5 APIs

---

## 5.1 Topics

### 5.1.1 Querying Topics

#### Function

This API is used to query topics by page. The topics are sorted by creation time in descending order. You can specify offset and limit. If no topic has been created, an empty list is returned.

#### URI

GET /v2/{project\_id}/notifications/topics

**Table 5-1** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see <a href="#">Obtaining the Project ID</a> .

**Table 5-2** Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Specifies the offset. If the offset is an integer greater than 0 but less than the number of resources, all resources in excess of this offset will be queried. The default offset is 0. Default: <b>0</b>
limit	No	Integer	Specifies the maximum number of records in each query. The number ranges from 1 to 100 and is generally 10, 20, or 50. Specifies the number of resources returned on each page. The default number is 100. Default: <b>100</b>
enterprise_project_id	No	String	Specifies the enterprise project ID. The default enterprise project ID is 0. Default: <b>0</b>
name	No	String	Specifies the name of the topic to be searched for, which must be fully matched.
fuzzy_name	No	String	Specifies the name of the topic to be searched for, which is fuzzy match. startwith() is used for the fuzzy match.

## Request Parameters

**Table 5-3** Request header parameters

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

## Response Parameters

**Status code: 200**

**Table 5-4** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
topic_count	Integer	Specifies the number of returned topics. No matter what offset and limit values you have set in the request, this API always returns the total number of topics in your account.
topics	Array of <a href="#">ListTopicsItem</a> objects	Specifies the topic structure array.

**Table 5-5** ListTopicsItem

Parameter	Type	Description
topic_urn	String	Specifies the resource identifier of the topic, which is unique.
name	String	Specifies the topic name.
display_name	String	Specifies the topic display name, which is presented as the name of the email sender in email messages.
push_policy	Integer	Specifies the message push policy. 0 indicates that the message sending fails and the message is cached in the queue. 1 indicates that the failed message is discarded.
enterprise_project_id	String	Specifies the enterprise project ID.

**Status code: 400**

**Table 5-6** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 403****Table 5-7** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 404****Table 5-8** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 500****Table 5-9** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

## Example Requests

Querying topics

```
GET https://{SMN_Endpoint}/v2/{project_id}/notifications/topics?offset=0&limit=100
null
```

## Example Responses

**Status code: 200**

OK

```
{
  "request_id" : "6a63a18b8bab40ffb71ebd9cb80d0085",
```

```
"topic_count" : 1,
"topics" : [ {
  "topic_urn" : "urn:smn:regionId:8bad8a40e0f7462f8c1676e3f93a8183:test_topic_v2",
  "display_name" : "testtest",
  "name" : "test_topic_v1",
  "push_policy" : 0,
  "enterprise_project_id" : "0"
} ]
}
```

## Status Codes

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

## Error Codes

See [Error Codes](#).

## 5.1.2 Creating a Topic

### Function

This API is used to create a topic. Each user can create up to 3,000 topics. In high-concurrent scenarios, a user may create a few topics more than 3,000. The API is idempotent. It returns a successful result after creating a topic. If a topic of the same name already exists, the status code is 200. Otherwise, the status code is 201.

### URI

POST /v2/{project\_id}/notifications/topics

**Table 5-10** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see <a href="#">Obtaining the Project ID</a> .

## Request Parameters

**Table 5-11** Request header parameters

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

**Table 5-12** Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Specifies the topic name. Enter 1 to 255 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed. The topic name must start with a letter or digit. Minimum: <b>1</b> Maximum: <b>255</b>
display_name	Yes	String	Specifies the topic display name, which is presented as the name of the email sender in email messages. The display name cannot exceed 192 bytes. display_name is left blank by default. Minimum: <b>1</b> Maximum: <b>192</b>
enterprise_project_id	No	String	Specifies the enterprise project ID. It is required only when the enterprise project function is enabled. Default: <b>0</b>

## Response Parameters

Status code: 201

**Table 5-13** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
topic_urn	String	Specifies the resource identifier of the topic, which is unique. To obtain the resource identifier, see [Querying Topics].

**Status code: 400****Table 5-14** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 403****Table 5-15** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 404****Table 5-16** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 500**



**Table 5-17** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

## Example Requests

Creating a topic

```
POST https://{SMN_Endpoint}/v2/{project_id}/notifications/topics
```

```
{  
  "name" : "test_topic_v2",  
  "display_name" : "testtest"  
}
```

## Example Responses

**Status code: 201**

OK

```
{  
  "request_id" : "6a63a18b8bab40ffb71ebd9cb80d0085",  
  "topic_urn" : "urn:smn:regionId:f96188c7ccaf4ffba0c9aa149ab2bd57:test_topic_v2"  
}
```

## Status Codes

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

## Error Codes

See [Error Codes](#).

## 5.1.3 Querying Details About a Topic

### Function

This API is used to query details about a topic.

### URI

GET /v2/{project\_id}/notifications/topics/{topic\_urn}

**Table 5-18** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see <a href="#">Obtaining the Project ID</a> .
topic_urn	Yes	String	Specifies the resource identifier of the topic, which is unique. To obtain the resource identifier, see <a href="#">Querying Topics</a> .

### Request Parameters

**Table 5-19** Request header parameters

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

### Response Parameters

**Status code: 200**

**Table 5-20** Response body parameters

Parameter	Type	Description
update_time	String	Specifies when the topic was updated. The UTC time is in YYYY-MM-DDTHH:MM:SSZ format.

Parameter	Type	Description
push_policy	Integer	Specifies the message push policy. 0 indicates that the message sending fails and the message is cached in the queue. 1 indicates that the failed message is discarded.
create_time	String	Specifies when the topic is created. The UTC time is in YYYY-MM-DDTHH:MM:SSZ format.
name	String	Specifies the topic name.
topic_urn	String	It is the unique identifier of a topic. To obtain the resource identifier, see <a href="#">Querying Topics</a> .
display_name	String	Specifies the topic display name, which is presented as the name of the email sender in email messages.
request_id	String	Specifies the request ID, which is unique.
enterprise_project_id	String	Specifies the enterprise project ID.

**Status code: 400****Table 5-21** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 403****Table 5-22** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 404**

**Table 5-23** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 500****Table 5-24** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

## Example Requests

Querying details about a topic

```
GET https://{SMN_Endpoint}/v2/{project_id}/notifications/topics/urn:smn:regionId:8bad8a40e0f7462f8c1676e3f93a8183:test_create_topic_v2
null
```

## Example Responses

**Status code: 200**

OK

```
{
  "update_time" : "2016-08-01T02:16:38Z",
  "push_policy" : 0,
  "create_time" : "2016-08-01T02:16:38Z",
  "name" : "test_create_topic_v2",
  "topic_urn" : "urn:smn:regionId:8bad8a40e0f7462f8c1676e3f93a8183:test_create_topic_v2",
  "display_name" : "test create topic v2",
  "request_id" : "6837531fd3f54550927b930180a706bf",
  "enterprise_project_id" : "0"
}
```

## Status Codes

Status Code	Description
200	OK

Status Code	Description
400	Bad Request
403	Unauthorized
404	Not Found
500	Internal Server Error

## Error Codes

See [Error Codes](#).

## 5.1.4 Updating a Topic

### Function

This API is used to update the topic display name.

### URI

PUT /v2/{project\_id}/notifications/topics/{topic\_urn}

**Table 5-25** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see <a href="#">Obtaining the Project ID</a> .
topic_urn	Yes	String	Specifies the resource identifier of the topic, which is unique. To obtain the resource identifier, see <a href="#">Querying Topics</a> .

## Request Parameters

**Table 5-26** Request header parameters

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

**Table 5-27** Request body parameters

Parameter	Mandatory	Type	Description
display_name	Yes	String	Specifies the topic display name, which is presented as the name of the email sender in email messages. The display name cannot exceed 192 bytes. Minimum: <b>1</b> Maximum: <b>192</b>

## Response Parameters

**Status code: 200****Table 5-28** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.

**Status code: 400****Table 5-29** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 403****Table 5-30** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 404****Table 5-31** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 500****Table 5-32** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

## Example Requests

Updating a topic

```
PUT https://{SMN_Endpoint}/v2/{project_id}/notifications/topics/  
urn:smn:regionId:f96188c7ccaf4ffba0c9aa149ab2bd57:test_topic_v2
```

```
{  
  "display_name" : "testtest222"  
}
```

## Example Responses

**Status code: 200**

OK

```
{  
  "request_id" : "6a63a18b8bab40ffb71ebd9cb80d0085"  
}
```

## Status Codes

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

## Error Codes

See [Error Codes](#).

### 5.1.5 Deleting a Topic

#### Function

This API is used to delete a topic.

#### URI

DELETE /v2/{project\_id}/notifications/topics/{topic\_urn}

**Table 5-33** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see <a href="#">Obtaining the Project ID</a> .
topic_urn	Yes	String	Specifies the resource identifier of the topic, which is unique. To obtain the resource identifier, see <a href="#">Querying Topics</a> .



## Request Parameters

**Table 5-34** Request header parameters

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

## Response Parameters

**Status code: 200****Table 5-35** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.

**Status code: 400****Table 5-36** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 403****Table 5-37** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 404**

**Table 5-38** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 500****Table 5-39** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

## Example Requests

Deleting a topic

```
DELETE https://{SMN_Endpoint}/v2/{project_id}/notifications/topics/  
urn:smn:regionId:f96188c7ccaf4ffba0c9aa149ab2bd57:test_topic_v2  
  
null
```

## Example Responses

**Status code: 200**

OK

```
{  
  "request_id" : "6a63a18b8bab40ffb71ebd9cb80d0085"  
}
```

## Status Codes

Status Code	Description
200	OK
400	Bad Request
403	Unauthorized
404	Not Found

Status Code	Description
500	Internal Server Error

## Error Codes

See [Error Codes](#).

## 5.1.6 Querying a Topic Policy

### Function

This API is used to query a topic policy.

### URI

GET /v2/{project\_id}/notifications/topics/{topic\_urn}/attributes

**Table 5-40** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see <a href="#">Obtaining the Project ID</a> .
topic_urn	Yes	String	Specifies the resource identifier of the topic, which is unique. To obtain the resource identifier, see <a href="#">Querying Topics</a> .

**Table 5-41** Query Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Specifies the topic policy name. Only specified policy names are supported. For details, see <a href="#">Topic Attribute List</a> .

## Request Parameters

**Table 5-42** Request header parameters

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

## Response Parameters

Status code: 200

**Table 5-43** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
attributes	<a href="#">access_policy</a> object	Specifies the attribute key-value pair. access_policy: topic access policy introduction: description of a topic

**Table 5-44** access\_policy

Parameter	Type	Description
Version	String	Specifies the policy specification version. Only 2016-09-07 is supported.
Id	String	Specifies the policy ID, which uniquely identifies a policy. Id must be specified.
Statement	Array of <a href="#">Statement</a> objects	You can use statements to configure a topic policy. Each topic policy may contain one or more statements. You can use statements to grant topic operation permissions to other users or cloud services.

**Table 5-45** Statement

Parameter	Type	Description
Sid	String	Specifies the statement ID. The statement ID must be unique, for example, statement01 or statement02.
Effect	String	Specifies the statement effect. The effect can be Allow or Deny.
Principal	String	<p>Specifies the object the statement applies to. The following two types of objects are supported:</p> <p>CSP indicates cloud users.</p> <p>Service indicates cloud services.</p> <p>Either the Principal or NotPrincipal element must be configured. Then, The format of the CSP object is urn:csp:iam::domainId:root, where domainId indicates the account ID of another user.</p> <p>If you enter Service, you must specify the cloud service names in lower case.</p>
NotPrincipal	String	<p>NotPrincipal: Specifies the object that the statement does not apply to.</p> <p>The following two types of objects are supported:</p> <p>CSP indicates cloud users.</p> <p>Service indicates cloud services.</p> <p>Either the Principal or NotPrincipal element must be configured. Then, The format of the CSP object is urn:csp:iam::domainId:root, where domainId indicates the account ID of another user.</p> <p>If you enter Service, you must specify the cloud service names in lower case.</p>

Parameter	Type	Description
Action	String	Specifies the allowed statement action.You can use a wildcard character to configure a type of actions, for example, SMN:Update* and SMN>Delete*. If you only enter a wildcard character (*) in a statement, all supported actions are configured.Either Action or NotAction must be configured.The following actions are supported:SMN:UpdateTopicSMN>DeleteTopicSMN:QueryTopicDetailSMN:ListTopicAttributesSMN:UpdateTopicAttributesSMN>DeleteTopicAttributesSMN>DeleteTopicAttributeByNameSMN:ListSubscriptionsByTopicSMN:SubscribeSMN:UnsubscribeSMN:Publish
NotAction	String	Specifies the statement action that is not allowed.You can use a wildcard character to configure a type of actions, for example, SMN:Update* and SMN>Delete*. If you only enter a wildcard character (*) in a statement, all supported actions are configured.Either Action or NotAction must be configured.The following actions are supported:SMN:UpdateTopicSMN>DeleteTopicSMN:QueryTopicDetailSMN:ListTopicAttributesSMN:UpdateTopicAttributesSMN>DeleteTopicAttributesSMN>DeleteTopicAttributeByNameSMN:ListSubscriptionsByTopicSMN:SubscribeSMN:UnsubscribeSMN:Publish
Resource	String	Specifies the topic the statement applies to. Either Resource or NotResource must be configured. You need to enter a topic URN.
NotResource	String	Specifies the topic that the statement does not apply to. Either Resource or NotResource must be configured. You need to enter a topic URN.

**Status code: 400**

**Table 5-46** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 403**

**Table 5-47** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 404**

**Table 5-48** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 500**

**Table 5-49** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

## Example Requests

Querying a topic policy

```
GET https://{SMN_Endpoint}/v2/{project_id}/notifications/topics/urn:smn:regionId:8bad8a40e0f7462f8c1676e3f93a8183:test_create_topic_v2/attributes?name=access_policy  
  
null
```

## Example Responses

**Status code: 200**

OK

```
{  
  "request_id" : "6837531fd3f54550927b930180a706bf",  
  "attributes" : {  
    "access_policy" : {  
      "version" : "2016-09-07",  
      "Id" : "__default_policy_ID",  
      "Statement" : [ {  
        "Sid" : "__user_pub_0",  
        "Effect" : "Allow",  
        "Principal" : [ {  
          "CSP" : [ "urn:csp:iam::93dc1b4697ac493d9b7d089569f86b32:root" ]  
        } ],  
        "Action" : [ "SMN:Publish", "SMN:QueryTopicDetail" ],  
        "Resource" : "urn:smn:regionId:8bad8a40e0f7462f8c1676e3f93a8183:aaa"  
      } ],  
    }, {  
      "Sid" : "__service_pub_0",  
      "Effect" : "Allow",  
      "Principal" : [ {  
        "Service" : [ "obs" ]  
      } ],  
      "Action" : [ "SMN:Publish", "SMN:QueryTopicDetail" ],  
      "Resource" : "urn:smn:regionId:8bad8a40e0f7462f8c1676e3f93a8183:aaa"  
    } ]  
  }  
}
```

## Status Codes

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

## Error Codes

See [Error Codes](#).



## 5.1.7 Deleting All Topic Policies

### Function

This API is used to delete all topic policies.

### URI

DELETE /v2/{project\_id}/notifications/topics/{topic\_urn}/attributes

**Table 5-50** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see <a href="#">Obtaining the Project ID</a> .
topic_urn	Yes	String	Specifies the resource identifier of the topic, which is unique. To obtain the resource identifier, see <a href="#">Querying Topics</a> .

### Request Parameters

**Table 5-51** Request header parameters

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

### Response Parameters

**Status code: 200**

**Table 5-52** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.

**Status code: 400****Table 5-53** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 403****Table 5-54** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 404****Table 5-55** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 500****Table 5-56** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

## Example Requests

```
DELETE https://{SMN_Endpoint}/v2/{project_id}/notifications/topics/{topic_urn}/attributes
null
```

## Example Responses

Status code: 200

OK

```
{
  "request_id" : "6837531fd3f54550927b930180a706bf"
}
```

## Status Codes

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

## Error Codes

See [Error Codes](#).

## 5.1.8 Updating a Topic Policy

### Function

This API is used to update a topic policy.

### URI

PUT /v2/{project\_id}/notifications/topics/{topic\_urn}/attributes/{name}

**Table 5-57** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see <a href="#">Obtaining the Project ID</a> .

Parameter	Mandatory	Type	Description
topic_urn	Yes	String	Specifies the resource identifier of the topic, which is unique. To obtain the resource identifier, see <a href="#">Querying Topics</a> .
name	Yes	String	Specifies the topic policy name. Only specified policy names are supported. For details, see <a href="#">Topic Attribute List</a> .

## Request Parameters

**Table 5-58** Request header parameters

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

**Table 5-59** Request body parameters

Parameter	Mandatory	Type	Description
value	Yes	String	<ol style="list-style-type: none"><li>If you set name to access_policy, value is the topic attribute, and the maximum length of value is 30 KB.</li><li>If you set name to introduction, value is the topic introduction, and the maximum length of value is 120 bytes.</li></ol>

## Response Parameters

**Status code: 200**

**Table 5-60** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.

**Status code: 400****Table 5-61** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 403****Table 5-62** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 404****Table 5-63** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 500**

**Table 5-64** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

## Example Requests

- Updating a topic policy

PUT https://{SMN\_Endpoint}/v2/{project\_id}/notifications/topics/{topic\_urn}/attributes/access\_policy

```
{
  "value" : "{ \"Version\": \"2016-09-07\", \"Id\": \"__default_policy_ID\", \"Statement\": [ { \"Sid\": \"__user_pub_0\", \"Effect\": \"Allow\", \"Principal\": { \"CSP\": [ \"urn:csp:iam::domainID:root\" ] }, \"Action\": [ \"SMN:Publish\", \"SMN:QueryTopicDetail\" ], \"Resource\": \"{topic_urn}\" }, { \"Sid\": \"__service_pub_0\", \"Effect\": \"Allow\", \"Principal\": { \"Service\": [ \"obs\" ] }, \"Action\": [ \"SMN:Publish\", \"SMN:QueryTopicDetail\" ], \"Resource\": \"{topic_urn}\" } ] }"
```

- Updating a topic policy

PUT https://{SMN\_Endpoint}/v2/{project\_id}/notifications/topics/{topic\_urn}/attributes/introduction

```
{
  "value" : ""
}
```

## Example Responses

**Status code: 200**

OK

```
{
  "request_id" : "6837531fd3f54550927b930180a706bf"
}
```

## Status Codes

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

## Error Codes

See [Error Codes](#).

## 5.1.9 Deleting a Specified Topic Policy

### Function

This API is used to delete a specified topic policy.

### URI

DELETE /v2/{project\_id}/notifications/topics/{topic\_urn}/attributes/{name}

**Table 5-65** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see <a href="#">Obtaining the Project ID</a> .
topic_urn	Yes	String	Specifies the resource identifier of the topic, which is unique. To obtain the resource identifier, see <a href="#">Querying Topics</a> .
name	Yes	String	Specifies the topic policy name. Only specified policy names are supported. For details, see <a href="#">Topic Attribute List</a> .

### Request Parameters

**Table 5-66** Request header parameters

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

### Response Parameters

**Status code: 200**

**Table 5-67** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.

**Status code: 400****Table 5-68** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 403****Table 5-69** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 404****Table 5-70** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 500**



**Table 5-71** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

## Example Requests

Deleting a specified topic policy

```
DELETE https://{SMN_Endpoint}/v2/{project_id}/notifications/topics/{topic_urn}/attributes/access_policy
null
```

## Example Responses

**Status code: 200**

OK

```
{
  "request_id" : "6837531fd3f54550927b930180a706bf"
}
```

## Status Codes

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

## Error Codes

See [Error Codes](#).

## 5.2 Subscriptions

## 5.2.1 Querying Subscriptions

### Function

This API is used to query the list of all subscriptions by page. The list is sorted by subscription adding time in ascending order. You can specify offset and limit. If no subscription has been added to the topic, an empty list is returned.

### URI

GET /v2/{project\_id}/notifications/subscriptions

**Table 5-72** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see <a href="#">Obtaining the Project ID</a> .

**Table 5-73** Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Specifies the offset. If the offset is an integer greater than 0 but less than the number of resources, all resources in excess of this offset will be queried. The default offset is 0. Default: <b>0</b>
limit	No	Integer	Specifies the maximum number of records in each query. The number ranges from 1 to 100 and is generally 10, 20, or 50. Specifies the number of resources returned on each page. The default number is 100. Default: <b>100</b>
protocol	No	String	Specifies the protocol name. The enumerated values are http, https, sms, email, functionstage, dms, and application.

Parameter	Mandatory	Type	Description
status	No	Integer	Specifies the subscription status. 0: The subscription has not been confirmed. 1: The subscription has been confirmed. 2: Confirmation is not required. 3: The subscription was canceled. 4: The subscription was deleted.
endpoint	No	String	Specifies the subscription endpoint.

## Request Parameters

Table 5-74 Request header parameters

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

## Response Parameters

Status code: 200

Table 5-75 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
subscription_count	Integer	Specifies the number of subscriptions.
subscriptions	Array of <a href="#">ListSubscriptionItem</a> objects	Specifies the subscription structure.

**Table 5-76** ListSubscriptionsItem

Parameter	Type	Description
topic_urn	String	Specifies the resource identifier of the topic, which is unique.
protocol	String	Specifies the subscription protocol. (Different protocols indicate different types of endpoints to receive messages.) The following protocols are supported: default email: The endpoints are email addresses. sms: The endpoints are phone numbers. functionstage: FunctionGraph (function) transmission protocol. The endpoints are functions. http and https: The endpoints are URLs.
subscription_urn	String	Specifies the resource identifier of a subscription, which is unique.
owner	String	Specifies the project ID of the topic creator.
endpoint	String	Specifies the message receiving endpoint.
remark	String	Specifies the remarks.
status	Integer	0 indicates that the subscription is not confirmed. 1 indicates that the subscription is confirmed. 3 indicates that the subscription is canceled.

**Status code: 400****Table 5-77** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 403**

**Table 5-78** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 404****Table 5-79** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 500****Table 5-80** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

## Example Requests

Querying subscriptions

```
GET https://{SMN_Endpoint}/v2/{project_id}/notifications/subscriptions?offset=0&limit=2
null
```

## Example Responses

**Status code: 200**

OK

```
{
  "request_id" : "6a63a18b8bab40ffb71ebd9cb80d0085",
  "subscription_count" : 2,
  "subscriptions" : [ {
    "topic_urn" : "urn:smn:regionId:762bdb3251034f268af0e395c53ea09b:test_topic_v1",
```

```
"protocol" : "sms",
"subscription_urn" : "urn:smn:regionId:
762bdb3251034f268af0e395c53ea09b:test_topic_v1:2e778e84408e44058e6cbc6d3c377837",
"owner" : "762bdb3251034f268af0e395c53ea09b",
"endpoint" : "xxxxxxxxxx",
"remark" : "",
"status" : 0
}, {
"topic_urn" : "urn:smn:regionId:762bdb3251034f268af0e395c53ea09b:test_topic_v1",
"protocol" : "email",
"subscription_urn" : "urn:smn:regionId:
762bdb3251034f268af0e395c53ea09b:test_topic_v1:a2d52a9f5c3b47f48c3fafb177a58796",
"owner" : "762bdb3251034f268af0e395c53ea09b",
"endpoint" : "xx@xx.com",
"remark" : "",
"status" : 0
}]
}
```

## Status Codes

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

## Error Codes

See [Error Codes](#).

## 5.2.2 Querying Subscriptions of a Specified Topic

### Function

This API is used to query subscriptions to a specified topic by page. The list is sorted by subscription adding time in ascending order. You can specify offset and limit. If no subscription has been added to the topic, an empty list is returned.

### URI

GET /v2/{project\_id}/notifications/topics/{topic\_urn}/subscriptions

**Table 5-81** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see <a href="#">Obtaining the Project ID</a> .
topic_urn	Yes	String	Specifies the resource identifier of the topic, which is unique. To obtain the resource identifier, see <a href="#">Querying Topics</a> .

**Table 5-82** Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Specifies the offset. If the offset is an integer greater than 0 but less than the number of resources, all resources in excess of this offset will be queried. The default offset is 0. Default: <b>0</b>
limit	No	Integer	Specifies the maximum number of records in each query. The number ranges from 1 to 100 and is generally 10, 20, or 50. Specifies the number of resources returned on each page. The default number is 100. Default: <b>100</b>

## Request Parameters

**Table 5-83** Request header parameters

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

## Response Parameters

Status code: 200

**Table 5-84** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
subscription_count	Integer	Specifies the number of subscriptions.
subscriptions	Array of <a href="#">ListSubscriptionsItem</a> objects	Specifies the subscription structure.

**Table 5-85** ListSubscriptionsItem

Parameter	Type	Description
topic_urn	String	Specifies the resource identifier of the topic, which is unique.
protocol	String	Specifies the subscription protocol. (Different protocols indicate different types of endpoints to receive messages.) The following protocols are supported: default email: The endpoints are email addresses. sms: The endpoints are phone numbers. functionstage: FunctionGraph (function) transmission protocol. The endpoints are functions. http and https: The endpoints are URLs.



Parameter	Type	Description
subscription_u rn	String	Specifies the resource identifier of a subscription, which is unique.
owner	String	Specifies the project ID of the topic creator.
endpoint	String	Specifies the message receiving endpoint.
remark	String	Specifies the remarks.
status	Integer	0 indicates that the subscription is not confirmed. 1 indicates that the subscription is confirmed. 3 indicates that the subscription is canceled.

**Status code: 400****Table 5-86** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 403****Table 5-87** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 404****Table 5-88** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.

Parameter	Type	Description
message	String	Describes the error message.

**Status code: 500**

**Table 5-89** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

## Example Requests

Querying subscriptions of a specified topic

```
GET https://{SMN_Endpoint}/v2/{project_id}/notifications/topics/urn:smn:regionId:762bdb3251034f268af0e395c53ea09b:test_topic_v1/subscriptions?offset=0&limit=100
null
```

## Example Responses

**Status code: 200**

OK

```
{
  "request_id" : "6a63a18b8bab40ffb71ebd9cb80d0085",
  "subscription_count" : 2,
  "subscriptions" : [ {
    "topic_urn" : "urn:smn:regionId:762bdb3251034f268af0e395c53ea09b:test_topic_v1",
    "protocol" : "sms",
    "subscription_urn" : "urn:smn:regionId:762bdb3251034f268af0e395c53ea09b:test_topic_v1:2e778e84408e44058e6cbc6d3c377837",
    "owner" : "762bdb3251034f268af0e395c53ea09b",
    "endpoint" : "xxxxxxxxxx",
    "remark" : "",
    "status" : 0
  }, {
    "topic_urn" : "urn:smn:regionId:762bdb3251034f268af0e395c53ea09b:test_topic_v1",
    "protocol" : "email",
    "subscription_urn" : "urn:smn:regionId:762bdb3251034f268af0e395c53ea09b:test_topic_v1:a2d52a9f5c3b47f48c3fafb177a58796",
    "owner" : "762bdb3251034f268af0e395c53ea09b",
    "endpoint" : "xx@xx.com",
    "remark" : "",
    "status" : 0
  }
  ]
}
```

## Status Codes

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

## Error Codes

See [Error Codes](#).

### 5.2.3 Adding a Subscription

#### Function

This API is used to add a subscription to a specified topic. If the status of the subscription is unconfirmed, a confirmation message is sent to the subscriber. After confirming the subscription, the subscriber can receive notification messages published to the topic. By default, 10,000 subscriptions can be added to a topic. However, in rare high-concurrency scenarios, extra subscriptions may be added successfully. The API is idempotent. If the added subscription already exists, a successful result and status code 200 are returned. Otherwise, the status code is 201.

#### URI

POST /v2/{project\_id}/notifications/topics/{topic\_urn}/subscriptions

**Table 5-90** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see <a href="#">Obtaining the Project ID</a> .
topic_urn	Yes	String	Specifies the resource identifier of the topic, which is unique. To obtain the resource identifier, see <a href="#">Querying Topics</a> .

## Request Parameters

**Table 5-91** Request header parameters

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

**Table 5-92** Request body parameters

Parameter	Mandatory	Type	Description
protocol	Yes	String	Specifies the subscription protocol. (Different protocols indicate different types of endpoints to receive messages.) The following protocols are supported: email: The endpoints are email addresses. sms: The endpoints are phone numbers. functionstage: FunctionGraph (function) transmission protocol. The endpoints are functions. http and https: The endpoints are URLs. callnotify: The endpoints are phone numbers.

Parameter	Mandatory	Type	Description
endpoint	Yes	String	Note: For an HTTPS subscription, the endpoint starts with https://. For an email subscription, the endpoint must be an email address. For an SMS subscription, the endpoint is a phone number. For a FunctionStage protocol, the endpoint must be a function. For a DMS subscription, the endpoint is a message queue. For an application subscription, the endpoint must be a mobile device added to a platform application. For a voice notification subscription, the endpoint is a phone number.
remark	No	String	Specifies the remarks. The remarks must be UTF-8-coded and can contain up to 128 bytes.

## Response Parameters

**Status code: 201**

**Table 5-93** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
subscription_urn	String	Specifies the resource identifier of a subscription, which is unique.

**Status code: 400**

**Table 5-94** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 403****Table 5-95** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 404****Table 5-96** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 500****Table 5-97** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

## Example Requests

Adding a subscription to a specified topic

```
POST https://{SMN_Endpoint}/v2/{project_id}/notifications/topics/urn:smn:regionId:762bdb3251034f268af0e395c53ea09b:test_topic_v1/subscriptions
{
  "protocol" : "email",
  "endpoint" : "xxx@xxx.com",
  "remark" : "O&M"
}
```

## Example Responses

**Status code: 201**

OK

```
[ {
  "request_id" : "6a63a18b8bab40ffb71ebd9cb80d0085",
  "subscription_urn" : "urn:smn:regionId:762bdb3251034f268af0e395c53ea09b:test_topic_v1:2e778e84408e44058e6cbc6d3c377837"
} ]
```

## Status Codes

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

## Error Codes

See [Error Codes](#).

## 5.2.4 Deleting a Subscription

### Function

This API is used to delete a specified subscription.

### URI

DELETE /v2/{project\_id}/notifications/subscriptions/{subscription\_urn}

**Table 5-98** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see <a href="#">Obtaining the Project ID</a> .
subscription_u rn	Yes	String	Specifies the resource identifier of the subscriber, which is unique. To obtain the resource identifier, see <a href="#">Query Subscriptions</a> .

## Request Parameters

**Table 5-99** Request header parameters

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

## Response Parameters

**Status code: 200**

**Table 5-100** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.

**Status code: 400**

**Table 5-101** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.



**Status code: 403****Table 5-102** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 404****Table 5-103** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 500****Table 5-104** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

## Example Requests

Deleting a subscription

```
DELETE https://{SMN_Endpoint}/v2/{project_id}/notifications/subscriptions/urn:smn:regionId:  
762bdb3251034f268af0e395c53ea09b:test_topic_v1:2e778e84408e44058e6cbc6d3c377837
```

```
null
```

## Example Responses

**Status code: 200**

OK

```
{  
  "request_id" : "6a63a18b8bab40ffb71ebd9cb80d0085"  
}
```

## Status Codes

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

## Error Codes

See [Error Codes](#).

# 5.3 Templates

## 5.3.1 Querying Message Templates

### Function

This API is used to query the template list by page. The list is sorted by template creation time in ascending order. You can specify offset and limit. If no template has been created, an empty list is returned. The parameters `message_template_name` and `protocol` are added.

### URI

GET `/v2/{project_id}/notifications/message_template`

**Table 5-105** Path Parameters

Parameter	Mandatory	Type	Description
<code>project_id</code>	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see <a href="#">Obtaining the Project ID</a> .

**Table 5-106** Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Specifies the offset. If the offset is an integer greater than 0 but less than the number of resources, all resources in excess of this offset will be queried. The default offset is 0. Default: <b>0</b>
limit	No	Integer	The number ranges from 1 to 100 and is generally 10, 20, or 50. Specifies the number of resources returned on each page. The default number is 100. Default: <b>100</b>
message_template_name	No	String	Specifies the template name. Enter 1 to 64 characters, and start with a letter or digit. Only letters, digits, hyphens (-), and underscores (_) are allowed.
protocol	No	String	Specifies the protocol supported by the template. The following protocols are supported: default email sms functionstage dms http and https

## Request Parameters

**Table 5-107** Request header parameters

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

## Response Parameters

**Status code: 200****Table 5-108** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
message_template_count	Integer	Specifies the number of returned templates.
message_templates	Array of <b>MessageTemplate</b> objects	Specifies the Message_template structure array.

**Table 5-109** MessageTemplate

Parameter	Type	Description
message_template_id	String	Specifies the template ID.
message_template_name	String	Specifies the template name.
protocol	String	Specifies the protocol supported by the template. The following protocols are supported: email sms functionstage dms http and https

Parameter	Type	Description
tag_names	Array of strings	Specifies the variable list.
create_time	String	Specifies when the template was created. The UTC time is in YYYY-MM-DDTHH:MM:SSZ format.
update_time	String	Specifies the last time when the template was updated. The UTC time is in YYYY-MM-DDTHH:MM:SSZ format.

**Status code: 400**

**Table 5-110** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 403**

**Table 5-111** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 404**

**Table 5-112** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 500**

**Table 5-113** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Example Requests**

Querying message templates

```
GET https://{SMN_Endpoint}/v2/{project_id}/notifications/message_template?
offset=0&limit=2&message_template_name=test1&protocol=email
null
```

**Example Responses**

**Status code: 200**

OK

```
{
  "request_id" : "6a63a18b8bab40ffb71ebd9cb80d0085",
  "message_template_count" : 3,
  "message_templates" : [ {
    "message_template_name" : "confirm_message",
    "protocol" : "sms",
    "update_time" : "2016-08-02T08:22:18Z",
    "create_time" : "2016-08-02T08:22:18Z",
    "tag_names" : [ "topic_urn" ],
    "message_template_id" : "79227dfd88d4e52a1820ca1eb411635"
  }, {
    "message_template_name" : "confirm_message",
    "protocol" : "email",
    "update_time" : "2016-08-02T08:22:19Z",
    "create_time" : "2016-08-02T08:22:19Z",
    "tag_names" : [ "topic_id" ],
    "message_template_id" : "ecf63465804a4b10a0573980be78ffba"
  }, {
    "message_template_name" : "confirm_message",
    "protocol" : "https",
    "update_time" : "2016-08-02T08:22:20Z",
    "create_time" : "2016-08-02T08:22:20Z",
    "tag_names" : [ "topic_id" ],
    "message_template_id" : "57ba8dcecd844878c5dd5815b65d10f"
  } ]
}
```

**Status Codes**

Status Code	Description
200	OK

Status Code	Description
400	Bad Request
403	Unauthorized
404	Not Found
500	Internal Server Error

## Error Codes

See [Error Codes](#).

## 5.3.2 Creating a Message Template

### Function

This API is used to create a message template for quick message sending and reduced request data volume. By default, a user can create a maximum of 100 message templates. However, in rare high-concurrency scenarios, extra templates may be successfully created.

### URI

POST /v2/{project\_id}/notifications/message\_template

**Table 5-114** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see <a href="#">Obtaining the Project ID</a> .

### Request Parameters

**Table 5-115** Request header parameters

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

**Table 5-116** Request body parameters

Parameter	Mandatory	Type	Description
message_template_name	Yes	String	Specifies the template name. Enter 1 to 64 characters, and start with a letter or digit. Only letters, digits, hyphens (-), and underscores (_) are allowed.
protocol	Yes	String	Specifies the protocol supported by the template. The following protocols are supported: default email sms functionstage dms http and https
content	Yes	String	Specifies the template content, which supports plain text only. The template content cannot be left blank or larger than 256 KB.

## Response Parameters

**Status code: 201**

**Table 5-117** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
message_template_id	String	Specifies the resource identifier of the template, which is unique.

**Status code: 400**

**Table 5-118** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.



Parameter	Type	Description
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 403**

**Table 5-119** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 404**

**Table 5-120** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 500**

**Table 5-121** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

## Example Requests

Creating a message template

```
POST https://{SMN_Endpoint}/v2/{project_id}/notifications/message_template
{
```

```
"message_template_name" : "confirm_message",
"protocol" : "https",
"content" : "(1/2)You are invited to subscribe to topic({topic_id}). Click the following URL to confirm
subscription:(If you do not want to subscribe to this topic, ignore this message.)"
}
```

## Example Responses

**Status code: 201**

OK

```
{
  "request_id" : "6a63a18b8bab40ffb71ebd9cb80d0085",
  "message_template_id" : "57ba8dcecd844878c5dd5815b65d10f"
}
```

## Status Codes

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

## Error Codes

See [Error Codes](#).

### 5.3.3 Querying Details About a Message Template

#### Function

This API is used to query template details, including the template content.

#### URI

GET /v2/{project\_id}/notifications/message\_template/{message\_template\_id}

**Table 5-122** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.For details about how to obtain the project ID, see <a href="#">Obtaining the Project ID</a> .

Parameter	Mandatory	Type	Description
message_template_id	Yes	String	Specifies the unique resource ID of a template. To obtain the ID, see <a href="#">Querying Message Templates</a> .

## Request Parameters

**Table 5-123** Request header parameters

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

## Response Parameters

**Status code: 200**

**Table 5-124** Response body parameters

Parameter	Type	Description
message_template_id	String	Specifies the template ID.
message_template_name	String	Specifies the template name.
protocol	String	Specifies the protocol supported by the template. The following protocols are supported: default email sms functionstage dms http and https

Parameter	Type	Description
tag_names	Array of strings	Specifies the variable list. The variable name will be quoted in braces ({} in the template. When you use a template to send messages, you can replace the variable with any content.
create_time	String	Specifies when the template was created. The UTC time is in YYYY-MM-DDTHH:MM:SSZ format.
update_time	String	Specifies the last time when the template was updated. The UTC time is in YYYY-MM-DDTHH:MM:SSZ format.
content	String	Specifies the template content.
request_id	String	Specifies the request ID, which is unique.

## Example Requests

Querying details about a message template

```
GET https://{SMN_Endpoint}/v2/{project_id}/notifications/message_template/57ba8dcecd844878c5dd5815b65d10f
```

null

## Example Responses

**Status code: 200**

OK

```
{
  "message_template_id" : "57ba8dcecd844878c5dd5815b65d10f",
  "message_template_name" : "confirm_message",
  "protocol" : "https",
  "tag_names" : [ "topic_id_id4" ],
  "create_time" : "2016-08-02T08:22:20Z",
  "update_time" : "2016-08-02T08:22:25Z",
  "content" : "(1/24)You are invited to subscribe to topic({topic_id_id4}). Click the following URL to confirm subscription:(If you do not want to subscribe to this topic, ignore this message.)",
  "request_id" : "ba79ca8f794f4f50985ce7b98a401b47"
}
```

## Status Codes

Status Code	Description
200	OK

## Error Codes

See [Error Codes](#).

## 5.3.4 Modifying a Message Template

### Function

This API is used to modify the message template content.

### URI

PUT /v2/{project\_id}/notifications/message\_template/{message\_template\_id}

**Table 5-125** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see <a href="#">Obtaining the Project ID</a> .
message_template_id	Yes	String	Specifies the unique resource ID of a template. To obtain the ID, see <a href="#">Querying Message Templates</a> .

### Request Parameters

**Table 5-126** Request header parameters

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

**Table 5-127** Request body parameters

Parameter	Mandatory	Type	Description
content	Yes	String	Specifies the template content.

## Response Parameters

### Status code: 200

**Table 5-128** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.

### Status code: 400

**Table 5-129** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

### Status code: 403

**Table 5-130** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

### Status code: 404

**Table 5-131** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

### Status code: 500

**Table 5-132** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

## Example Requests

### Modifying a message template

```
PUT https://{SMN_Endpoint}/v2/{project_id}/notifications/message_template/  
b3ffa2cdda574168826316f0628f774f
```

```
{  
  "content" : "(1/22)You are invited to subscribe to topic({topic_id_id1}). Click the following URL to confirm  
subscription:(If you do not want to subscribe to this topic, ignore this message.)"  
}
```

## Example Responses

**Status code: 200**

OK

```
{  
  "request_id" : "6a63a18b8bab40ffb71ebd9cb80d0085"  
}
```

## Status Codes

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

## Error Codes

See [Error Codes](#).

## 5.3.5 Deleting a Message Template

### Function

This API is used to delete a message template. After you delete the template, you can no longer use it to publish messages.

### URI

DELETE /v2/{project\_id}/notifications/message\_template/{message\_template\_id}

**Table 5-133** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see <a href="#">Obtaining the Project ID</a> .
message_template_id	Yes	String	Specifies the unique resource ID of a template. To obtain the ID, see <a href="#">Querying Message Templates</a> .

### Request Parameters

**Table 5-134** Request header parameters

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

### Response Parameters

**Status code: 200**

**Table 5-135** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.



**Status code: 400****Table 5-136** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 403****Table 5-137** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 404****Table 5-138** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 500****Table 5-139** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

## Example Requests

Deleting a message template

```
DELETE https://{SMN_Endpoint}/v2/{project_id}/notifications/message_template/  
b3ffa2cdda574168826316f0628f774e  
  
null
```

## Example Responses

**Status code: 200**

OK

```
{  
  "request_id" : "6a63a18b8bab40ffb71ebd9cb80d0085"  
}
```

## Status Codes

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

## Error Codes

See [Error Codes](#).

# 5.4 Message Publishing

## 5.4.1 Publishing a Message

### Function

This API is used to publish messages to a topic. After the message ID is returned, the message has been saved and is to be pushed to the subscribers of the topic. Three message formats are supported:

message

message\_structure

message\_template\_name

If the three formats are specified at the same time, they take effect in the following sequence: message\_structure > message\_template\_name > message

## URI

POST /v2/{project\_id}/notifications/topics/{topic\_urn}/publish

**Table 5-140** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see <a href="#">Obtaining the Project ID</a> .
topic_urn	Yes	String	Specifies the resource identifier of the topic, which is unique. To obtain the resource identifier, see <a href="#">Querying Topics</a> .

## Request Parameters

**Table 5-141** Request header parameters

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

**Table 5-142** Request body parameters

Parameter	Mandatory	Type	Description
subject	No	String	Specifies the message subject, which is used as the email subject when you publish email messages. The length of the subject cannot exceed 512 bytes.

Parameter	Mandatory	Type	Description
message	No	String	Specifies the message content. The message content must be UTF-8-coded and can be no more than 256 KB. If the endpoint is a phone number that exceeds 490 characters, SMN will cut it off. The SMS message cannot contain square brackets ([]).For application subscribers, messages must comply with format requirements of the mobile push platform. For details, see the format of the application message body. Otherwise, the mobile app will fail to receive messages. HMS, APNS, and APNS_SANDBOX mobile push platforms are supported.Note:Three message formats are supported:messagemessage_structurmessage_template_nameAt least one of them must be set. If they are set at the same time, the effective priority ismessage_structure > message_template_name > message

Parameter	Mandatory	Type	Description
message_structure	No	String	<p>Specifies the message structure, which contains JSON strings. email, sms, http, https, dms, functionstage, HMS, APNS, or APNS_SANDBOX are supported. For details about HMS, APNS, and APNS_SANDBOX message formats, see the format of the application message body. The default protocol is mandatory. If the system fails to match any other protocols, the message using the default protocol is sent. Note: Three message formats are supported:</p> <pre> message_structure &gt; message_template_name At least one of them must be set. If they are set at the same time, the effective priority is message_structure &gt; message_template_name &gt; messageHMS transparent push message{ "hps": { "msg": { "type": 1, "body": { "key": "value" } } }}Huawei notification push message{ "hps": { "msg": { "type": 3, "body": { "content": "Push message content", "title": "Push message content" }, "action": { "type": 1, "param": { "intent": "#Intent;compo=com.rvr/.Activity;S.W=U;end" } } }, "ext": { "biTag": "Trump", "icon": "http://upload.w.org/00/150pxsvg.png" } }}Apple platform message{ "aps": { "alert": "hello world" } } </pre>

Parameter	Mandatory	Type	Description
message_template_name	No	String	Specifies the message template name. To obtain the name, see <a href="#">Querying Message Templates</a> . Note: Three message formats are supported: message_structure, message_template_name. At least one of them must be set. If they are set at the same time, the effective priority is message_structure > message_template_name > message.
tags	No	Map<String,String>	Specifies the dictionary consisting of variable parameters and values. The value cannot be left blank. This parameter is mandatory when you use a message template to publish messages. The key in the dictionary is the parameter name in the message template and contains a maximum of 21 characters. The value in the dictionary is the value after the key in the message template is replaced. The value cannot exceed 1 KB.
time_to_live	No	String	Specifies the maximum retention period of a message in SMN. After the retention period expires, SMN does not send this message. Unit: second. Default value: 3600s (one hour). The retention period must be a positive integer less than or equal to 86,400 (3600 x 24).

## Response Parameters

Status code: 200

**Table 5-143** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
message_id	String	Specifies the message ID, which is unique.

**Status code: 400****Table 5-144** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 403****Table 5-145** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 404****Table 5-146** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 429**

**Table 5-147** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 500**

**Table 5-148** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

## Example Requests

- Publishing a message

```
POST https://{SMN_Endpoint}/v2/{project_id}/notifications/topics/urn:smn:regionId:
f96188c7ccaf4ffba0c9aa149ab2bd57:test_create_topic_v2/publish
```

```
{
  "subject" : "test message v2",
  "message" : "Message test message v2",
  "time_to_live" : "3600"
}
```

- Publishing messages using a message structure

```
POST https://{SMN_Endpoint}/v2/{project_id}/notifications/topics/urn:smn:regionId:
f96188c7ccaf4ffba0c9aa149ab2bd57:test_create_topic_v2/publish
```

```
{
  "subject" : "test message v2",
  "message_structure" : "{\n  \"default\": \"xxx\", \n  \"APNS\": \"{\n    \"aps\": {\n      \"alert\": {\n        \"title\": \"\nxxx\", \n      \"body\": \"\nxxx\" \n    } \n  } \n } \n }",
  "time_to_live" : "3600"
}
```

- Publishing messages using a template

```
POST https://{SMN_Endpoint}/v2/{project_id}/notifications/topics/urn:smn:regionId:
f96188c7ccaf4ffba0c9aa149ab2bd57:test_create_topic_v2/publish
```

```
{
  "subject" : "test message template v2",
  "message_template_name" : "confirm_message",
  "time_to_live" : "3600",
  "tags" : {
    "topic_urn" : "topic_urn3331",
    "topic_id" : "topic_id3332"
  }
}
```



## Example Responses

Status code: 200

OK

```
{  
  "request_id" : "6a63a18b8bab40ffb71ebd9cb80d0085",  
  "message_id" : "bf94b63a5dfb475994d3ac34664e24f2"  
}
```

## Status Codes

Status Code	Description
200	OK
400	Bad Request
403	Unauthorized
404	Not Found
429	Too Many Requests
500	Internal Server Error

## Error Codes

See [Error Codes](#).

## 5.5 Version Querying

### 5.5.1 Querying All SMN API Versions

#### Function

This API is used to list all SMN API versions.

#### URI

GET /

## Request Parameters

**Table 5-149** Request header parameters

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

## Response Parameters

**Status code: 200****Table 5-150** Response body parameters

Parameter	Type	Description
versions	Array of <a href="#">VersionItem</a> objects	Specifies the list of all versions.

**Table 5-151** VersionItem

Parameter	Type	Description
id	String	Specifies the version ID, for example, v2.
min_version	String	Specifies the microversion. If the API supports microversions, the system returns the supported minimum microversion. If no, the system returns an empty value.
status	String	Specifies the version status. CURRENT: The version is the primary version. SUPPORTED: The version is an earlier version, but it is still supported. DEPRECATED: The version is a deprecated version, which may be deleted later.
updated	String	Specifies the version release time, which must be a UTC time. For example, the release time of v2 is 2014-06-28T12:20:21Z.

Parameter	Type	Description
version	String	Specifies the microversion. If the API supports microversions, the system returns the supported minimum microversion. If no, the system returns an empty value.
links	Array of <a href="#">LinkItem</a> objects	Specifies the API URL.

**Table 5-152** LinkItem

Parameter	Type	Description
href	String	Specifies the corresponding shortcut link.
rel	String	Specifies the shortcut link marker name.

**Status code: 400****Table 5-153** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 403****Table 5-154** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 404**

**Table 5-155** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 500**

**Table 5-156** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

## Example Requests

```
GET https://{SMN_Endpoint}/
null
```

## Example Responses

**Status code: 200**

OK

```
{
  "versions": {
    "id": "v2",
    "links": [ {
      "href": "https://127.0.0.1/v2",
      "rel": "self"
    } ],
    "min_version": "",
    "status": "CURRENT",
    "updated": "2018-09-19T00:00:00Z",
    "version": ""
  }
}
```

## Status Codes

Status Code	Description
200	OK
400	Bad Request

Status Code	Description
403	Unauthorized
404	Not Found
500	Internal Server Error

## Error Codes

See [Error Codes](#).

## 5.5.2 Querying the SMN API v2 Version

### Function

This API is used to query the version of SMN API v2.

### URI

GET `/api_version`

**Table 5-157** Path Parameters

Parameter	Mandatory	Type	Description
api_version	Yes	String	Specifies the version to be queried. Only v2 API is supported.

### Request Parameters

**Table 5-158** Request header parameters

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

### Response Parameters

**Status code: 200**

**Table 5-159** Response body parameters

Parameter	Type	Description
version	Object	Specifies the list of all v2 versions.

**Table 5-160** VersionItem

Parameter	Type	Description
id	String	Specifies the version ID, for example, v2.
min_version	String	Specifies the microversion. If the API supports microversions, the system returns the supported minimum microversion. If no, the system returns an empty value.
status	String	Specifies the version status. CURRENT: The version is the primary version. SUPPORTED: The version is an earlier version, but it is still supported. DEPRECATED: The version is a deprecated version, which may be deleted later.
updated	String	Specifies the version release time, which must be a UTC time. For example, the release time of v2 is 2014-06-28T12:20:21Z.
version	String	Specifies the microversion. If the API supports microversions, the system returns the supported minimum microversion. If no, the system returns an empty value.
links	Array of <a href="#">LinkItem</a> objects	Specifies the API URL.

**Table 5-161** LinkItem

Parameter	Type	Description
href	String	Specifies the corresponding shortcut link.
rel	String	Specifies the shortcut link marker name.

**Status code: 400**

**Table 5-162** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 403****Table 5-163** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 404****Table 5-164** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

**Status code: 500****Table 5-165** Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
code	String	Specifies the error code.
message	String	Describes the error message.

## Example Requests

```
GET https://{SMN_Endpoint}/v2
null
```

## Example Responses

**Status code: 200**

OK

```
{
  "version" : {
    "id" : "v2",
    "links" : [ {
      "href" : "https://127.0.0.1/v2",
      "rel" : "self"
    } ],
    "min_version" : "",
    "status" : "CURRENT",
    "updated" : "2018-09-19T00:00:00Z",
    "version" : ""
  }
}
```

## Status Codes

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

## Error Codes

See [Error Codes](#).



# 6 Examples

## 6.1 Example 1: Publishing Messages to a Topic

### Scenarios

This section describes how to publish messages by calling APIs. For details, see [Calling APIs](#).

### Involved APIs

- [Obtaining a User Token Through Password Authentication](#)
- [Creating a Topic](#)
- [Adding a Subscription](#)
- [Publishing a Message](#)

### Procedure

1. Obtain the token by following instructions in [Authentication](#).
2. Create a topic.
  - a. Send request **POST** `https://{SMN_Endpoint}/v2/{project_id}/notifications/topics`.
  - b. Add **X-Auth-Token** to the request header.
  - c. Specify the following parameters in the request body:

For details about the parameters, see [Creating a Topic](#).

```
{
  "name": "test_topic_v2", //(Mandatory) Topic name
  "display_name": "test", //(Optional) Display name
  "enterprise_project_id": "0" //Enterprise project ID (mandatory in the enterprise project
scenario)
}
```

Example response

```
{
  "request_id": "6a63a18b8bab40ffb71ebd9cb80d0085",
  "topic_urn": "urn:smn:regionId:f96188c7ccaf4ffba0c9aa149ab2bd57:test_topic_v2"
}
```

3. Add a subscription.
  - a. Send request **POST** `https://{SMN_Endpoint}/v2/{project_id}/notifications/topics/{topic_urn}/subscriptions`.

Set `topic_urn` based on the response in [2.c](#).

- b. Add **X-Auth-Token** to the request header.
  - c. Specify the following parameters in the request body:

```
{
  "protocol": "email", //(Mandatory) Subscription protocol
  "endpoint": "xxx@xx.com", //(Mandatory) Email address
  "remark": "Subscription" //(Optional) Description
}
```

Example response

```
{
  "subscriptions_result": [{
    "request_id": "126c17f805934e5eadf647b0860c7a0a",
    "subscription_urn": "urn:smn:regionId:f96188c7ccaf4ffba0c9aa149ab2bd57:test_topic_v2",
    "http_code": 201}]
}
```

#### NOTE

You can add multiple subscriptions to a topic.

- d. The subscription endpoint receives a confirmation message, and you must confirm the subscription in the email.
4. Publish a message.

- a. Send request **POST** `https://{SMN_Endpoint}/v2/{project_id}/notifications/topics/{topic_urn}/publish`.

- b. Add **X-Auth-Token** to the request header.

- c. Specify the following parameters in the request body:

```
{
  "subject": "test message v2", //(Optional) Message subject, which is displayed in email
  messages
  "message": "Message test message v2." //(Mandatory) Message to be published
}
```

Example response

```
{
  "request_id": "6a63a18b8bab40ffb71ebd9cb80d0085",
  "message_id": "992bbd32819448af95f83814cb3c7454"
}
```

#### NOTE

Only confirmed subscription endpoints can receive the message you publish.

## 6.2 Example 2: Publishing a Message Using a Message Template

### Scenarios

This section describes how to publish a message using a message template. For details, see [Calling APIs](#).

## Involved APIs

- [Obtaining a User Token Through Password Authentication](#)
- [Creating a Topic](#)
- [Adding a Subscription](#)
- [Creating a Message Template](#)
- [Publishing a Message](#)

## Procedure

1. Obtain the token by following instructions in [Authentication](#).
2. Create a topic.
  - a. Send request **POST** [https://{{SMN\\_Endpoint}}/v2/{project\\_id}/notifications/topics](https://{{SMN_Endpoint}}/v2/{project_id}/notifications/topics).
  - b. Add **X-Auth-Token** to the request header.
  - c. Specify the following parameters in the request body:

For details about the parameters, see [Creating a Topic](#).

```
{
  "name": "publish_by_template", //(Mandatory) Topic name
  "display_name": "test", //(Optional) Display name
  "enterprise_project_id": "0" //Enterprise project ID (mandatory in the enterprise project
scenario)
}
```

Example response

```
{
  "request_id": "a8f8161449564f569c19e2a9e3be25c9",
  "topic_urn": "urn:smn:br-iaas-
odin1:0605767e0a00d5762fe7c00d0e33345c:publish_by_template"
}
```

3. Add a subscription.
  - a. Send request **POST** [https://{{SMN\\_Endpoint}}/v2/{project\\_id}/notifications/topics/{topic\\_urn}/subscriptions](https://{{SMN_Endpoint}}/v2/{project_id}/notifications/topics/{topic_urn}/subscriptions).Set **topic\_urn** based on the response in [2.c](#).
- b. Add **X-Auth-Token** to the request header.
- c. Specify the following parameters in the request body:

```
{
  "protocol": "sms", //(Mandatory) Subscription protocol
  "endpoint": "86137***3629", //(Mandatory) Email address
  "remark": "Subscription" //(Optional) Description
}
```

Example response

```
{
  "subscriptions_result":[{
    "request_id":"126c17f805934e5eadf647b0860c7a0a",
    "subscription_urn":"urn:smn:br-iaas-
odin1:0605767e0a00d5762fe7c00d0e33345c:publish_by_template:
3e5ac4544a1947b7b0d9f743fe52bdbd",
    "http_code":201}]
}
```

### NOTE

You can add multiple subscriptions to a topic.

- d. The subscription endpoint receives a confirmation message, and you must confirm the subscription in the email.

4. Create a message template.  
Send request **POST** `https://{SMN_Endpoint}/v2/{project_id}/notifications/message_template`.

5. Add **X-Auth-Token** to the request header.

- a. Specify the following parameters in the request body:

```
{
  "message_template_name": "sms_template_test",
  "locale": "zh-cn",
  "content": "{content}",
  "protocol": "sms"
}
```

Example response

```
{
  "request_id": "e67228ac92324a58980e922ca600f8ef",
  "message_template_id": "cdb113996c5d49149fb97af36d9801ce"
}
```

- b. The subscription endpoint receives a confirmation message and you must confirm the subscription with your phone.

6. Use the message template to publish a message.

- a. Send request **POST** `https://{SMN_Endpoint}/v2/{project_id}/notifications/topics/{topic_urn}/publish`.

- b. Add **X-Auth-Token** to the request header.

- c. Specify the following parameters in the request body:

```
{
  "message_template_name": "sms_template_test",
  "tags": {
    "content": "hello test"
  },
  "subject": "template message test"
}
```

Example response

```
{
  "message_id": "5da965fd9e2c4036a0542317d944af83",
  "request_id": "c6be4517f985470e8448e42f9d2ec5a2"
}
```

 **NOTE**

Only confirmed subscription endpoints can receive the message you publish.

# 7 Permissions Policies and Supported Actions

---

## 7.1 Permissions Policies and Supported Actions

This section describes fine-grained permissions management for your SMN resources. If your Huawei Cloud account does not need individual IAM users, you can skip over this section.

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 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.

You can grant users permissions by using and **policies**. Roles: A type of coarse-grained authorization mechanism that defines service-level permissions based on user responsibilities. There are only a limited number of roles for granting permissions to users. Policies: A type of fine-grained authorization mechanism that defines permissions required to perform operations on specific cloud resources under certain conditions. This mechanism allows for more flexible policy-based authorization and secure access control.

### NOTE

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

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

## Supported Actions

IAM provides system-defined policies that can be directly used. You can also create custom policies and use them to supplement system-defined policies, implementing more refined access control. Actions supported by policies are specific to APIs. Common concepts related to policies include:

- **Permissions:** Statements in a policy that allow or deny certain operations.
- **APIs:** REST APIs that can be called by a user who has been granted specific permissions.
- **Actions:** Specific operations that are allowed or denied.
- **Related actions:** Actions on which a specific action depends to take effect. When assigning permissions for the action to a user, you also need to assign permissions for the dependent actions.
- **IAM or enterprise projects:** Type of projects for which an action will take effect. 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. Administrators can check whether an action supports IAM projects or enterprise projects in the action list. "√" indicates that the action supports the project and "x" indicates that the action does not support the project. For details about the differences between IAM and enterprise management, see [What Are the Differences Between IAM and Enterprise Management?](#)

SMN supports the following actions that can be defined in custom policies:

- **Topic Operations**, including actions supported by topic management APIs, such as APIs for creating, querying, updating, and deleting topics.
- **Template Operations**, including actions supported by message template management APIs, such as the APIs for creating, querying, updating, and deleting message templates.
- **Application Operations**, including actions supported by application management APIs, such as the APIs for creating, querying, updating, and deleting applications.
- **Tag Operations**, including actions supported by TMS APIs, such as the APIs for querying resources, adding a resource tag, adding or deleting resource tags in batches, and deleting a resource a tag.
- **Message Publishing**, including actions supported by message publishing management APIs, such as the message publishing API.
- **Sending an Application Message**, including actions supported by direct application messaging management API, such as the API for sending an application message.

## 7.2 Topic Operations

Permission	API	Action	IAM Project	Enterprise Project
Creating a topic	POST /v2/{project_id}/notifications/topics	smn:topic:create	√	√
Querying a topic	GET /v2/{project_id}/notifications/topics	smn:topic:list	√	√

Permission	API	Action	IAM Project	Enterprise Project
Updating a topic	PUT /v2/{project_id}/notifications/topics/{topic_urn}	smn:topic:update	√	√
Deleting a topic	DELETE /v2/{project_id}/notifications/topics/{topic_urn}	smn:topic:delete	√	√

## 7.3 Template Operations

Permission	API	Action	IAM Project	Enterprise Project
Creating a message template	POST /v2/{project_id}/notifications/message_template	smn:template:create	√	×
Querying a message template	GET /v2/{project_id}/notifications/message_template	smn:template:list	√	×
Modifying a message template	PUT /v2/{project_id}/notifications/message_template/{message_template_id}	smn:template:update	√	×
Deleting a message template	DELETE /v2/{project_id}/notifications/message_template/{message_template_id}	smn:template:delete	√	×

## 7.4 Application Operations

Permission	API	Action	IAM Project	Enterprise Project
Creating a platform application	POST /v2/{project_id}/notifications/applications	smn:application:create	√	√
Querying platform applications	GET /v2/{project_id}/notifications/applications?offset={offset}&limit={limit}&name={name}&platform={platform}	smn:application:list	√	√
Updating a platform application	PUT /v2/{project_id}/notifications/applications/{application_id}	smn:application:update	√	√
Deleting a platform application	DELETE /v2/{project_id}/notifications/applications/{application_id}	smn:application:delete	√	√

## 7.5 Tag Operations

Permission	API	Action	IAM Project	Enterprise Project
Adding a resource tag	POST /v2/{project_id}/{resource_type}/{resource_id}/tags	smn:tag:create	√	√



Permission	API	Action	IAM Project	Enterprise Project
Updating a tag	-	smn:tag:update	√	√
Deleting a resource tag	DELETE /v2/{project_id}/{resource_type}/{resource_id}/tags/{key}	smn:tag:delete	√	√
Querying resource tags	GET /v2/{project_id}/{resource_type}/{resource_id}/tags	smn:tag:list	√	√

## 7.6 Message Publishing

Permission	API	Action	IAM Project	Enterprise Project
Publishing a message	POST /v2/{project_id}/notifications/topics/{topic_urn}/publish	smn:topic:publish	√	×

## 7.7 Sending an Application Message

Permission	API	Action	IAM Project	Enterprise Project
Sending an application message	POST /v2/{project_id}/notifications/endpoints/{endpoint_urn}/publish	smn:application:publish	√	√

# 8 Public Parameters

## 8.1 Application Message Format

Table 8-1 Application message format

Type	Example Value	Remarks
HMS transparent push message	<pre>"hps": {   "msg" : {     "type" : 1,     "body" :     {"key":"value"}   } }</pre>	<p>You can choose to specify the message in text or JSON format.</p> <p><b>NOTE</b></p> <ul style="list-style-type: none"><li>• The JSON format is recommended, as shown in the example value.</li><li>• The message in text format is encoded using UTF-8.</li><li>• The message body cannot exceed 2 KB. For details, visit <a href="#">Huawei Mobile Services</a>.</li></ul>

Type	Example Value	Remarks
Huawei notification push message	<pre>"hps": {   "msg": {     "type": 3,     "body": {       "content": "Push message content",       "title": "Push message content"     },     "action": {       "type": 1,       "param": {         "intent": "#Intent;comp o=com.rvr/.Activity;S.W =U;end"       }     }   },   "ext": {     "biTag": "Trump",     "icon": "http:// upload.w.org/ 00/150pxsvg.png"   } }</pre>	
Apple platform message	<pre>{   "aps": {     "alert": "hello world"   } }</pre>	The message body cannot exceed 4 KB. For details, visit <a href="#">Apple Push Notification Service</a> .

## 8.2 Obtaining a Project ID

### Scenarios

A project ID is required for some URLs when an API is called. Therefore, you need to obtain a project ID in advance. Two methods are available:

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

## Obtain the Project ID by Calling an API

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

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

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

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

## Obtain a Project ID from the Console

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

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

# A Appendix

## A.1 Topic Attribute List

Attribute Name	Function	Default Value
access_policy	Configures topic access policy, which is used to limit the access permission of other users.	Empty string
introduction	Configures the topic introduction, which is displayed in the email or SMS confirmation messages.	Empty string

## A.2 General Request Return Values

### A.2.1 Exception Response

- Parameter description

Parameter	Type	Description
request_id	String	Request ID
code	String	See <a href="#">Error Codes</a>
message	String	See <a href="#">Error Codes</a> .

- Example

```
{
  "request_id": "aad0860d089c482b943971f802a6718e",
  "code": "SMN.0006",
  "message": "Topic not found."
}
```

## A.2.2 Status Codes

**Table A-1** Normal values

Returned Value	Description
200	Task submitted.
201	Resource created.

**Table A-2** Abnormal values

Returned Value	Description
400 Bad Request	Incorrect request parameters.
401 Unauthorized	Authentication failed.
403 Forbidden	No permission to access the requested resource.
404 Not Found	The requested resource does not exist.
500 Internal Server Error	Failed to complete the request because the service is abnormal.
501 Not Implemented	Failed to complete the request. The server does not support the requested function.
502 Bad Gateway	Failed to complete the request. The server receives an invalid response from the upstream server.
503 Service Unavailable	Failed to complete the request because the service is unavailable.
504 Gateway Timeout	Gateway times out.

## A.3 Error Codes

Status Code	Error Codes	Error Message	Description	Solution
200	SMN.0025	Template already exists.	The template already exists.	You cannot create the same template twice.
201	SMN.0121	An application with the same name but different properties already exists.	An application with the same name but different attributes already exists.	Enter a different application name.
201	SMN.0190	This endpoint already exists.	The endpoint already exists.	Enter another endpoint.
400	SMN.0002	Parameter: Name is invalid.	Invalid topic name.	Enter a valid topic name.
400	SMN.0003	Parameter: DisplayName is invalid.	Invalid display name.	Enter a valid display name for the topic.
400	SMN.0005	Parameter: TopicUrn is invalid.	Invalid topic URN.	Enter a valid topic_urn value.
400	SMN.0011	Parameter: Protocol is invalid.	Invalid protocol.	Specify a correct protocol.
400	SMN.0012	Parameter: Endpoint is invalid.	Invalid endpoint.	Specify a valid endpoint.
400	SMN.0014	Parameter: SubscriptionUrn is invalid.	Invalid subscription URN.	Enter a valid subscription-urn value.
400	SMN.0015	Parameter: Offset or limit is invalid.	Invalid offset or limit value.	Enter valid offset and limit values.
400	SMN.0017	Parameter: Remark is invalid.	Invalid remark value.	Enter a valid remark value.
400	SMN.0019	Producer Exceptions.	Generator exception.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
400	SMN.0021	MessageStructure is invalid.	Incorrect message structure.	Enter a valid message_structure value.
400	SMN.0024	Parameter: content is invalid.	Invalid content.	Enter a valid content value.
400	SMN.00290	SubscriberUrn is unavailable.	SubscriberUrn is unavailable.	Check whether the value of SubscriberUrn is correct.
400	SMN.0031	Parameter: template_id is invalid.	Invalid template ID.	Enter a valid template_id value.
400	SMN.0032	Parameter: message_template_name is invalid.	Invalid template name.	Enter a valid message_template_name value.
400	SMN.0033	Parameter: push_policy is invalid.	Invalid push_policy value.	Enter a valid push_policy value.
400	SMN.0034	Parameter: subscription_auth_policy is invalid.	Invalid subscription_auth_policy value.	Enter a valid subscription_auth_policy value.
400	SMN.0035	Parameter: validation_policy is invalid.	Invalid validation_policy value.	Enter a valid validation_policy value.
400	SMN.0036	Parameter: xdomain_type is invalid.	Invalid xdomain_type value.	Enter a valid xdomain_type value.
400	SMN.0038	Parameter: tag is invalid.	Invalid tag value.	Enter a valid tag value.
400	SMN.0042	Parameter: Message_template_name is invalid.	Invalid template name.	Enter a valid message_template_name value.
400	SMN.0043	Parameter: subscription is invalid.	Invalid subscription.	Enter a valid subscription.



Status Code	Error Codes	Error Message	Description	Solution
400	SMN.0044	Exceeded template limit.	Templates exceeded the maximum number allowed.	Each user can create no more than 100 message templates.
400	SMN.0046	Parameter: Attribute name is invalid.	Invalid attribute name.	Enter a valid attribute_name value.
400	SMN.0048	Parameter: Access policy is invalid.	Invalid access policy.	Enter a valid access_policy value.
400	SMN.0049	Parameter: Access policy version is invalid.	Invalid access policy version.	Enter a valid version of the access policy.
400	SMN.0050	Parameter: Access policy ID is invalid.	Invalid access policy ID.	Enter a valid access_policy id value.
400	SMN.0051	Parameter: Access policy statement is invalid.	Invalid value for access_policy statement.	Enter a valid access_policy statement value.
400	SMN.0052	Parameter: Access policy statement ID is invalid.	Invalid value for access_policy statement id.	Enter a valid access_policy statement id value.
400	SMN.0053	Parameter: Access policy statement resource is invalid.	Invalid value for access_policy statement resource.	Enter a valid access_policy statement resource value.
400	SMN.0054	Parameter: Access policy statement effect is invalid.	Invalid value for access_policy statement effect.	Enter a valid access_policy statement effect value.
400	SMN.0055	Parameter: Access policy statement action is invalid.	Invalid value for access_policy statement action.	Enter a valid access_policy statement action value.

Status Code	Error Codes	Error Message	Description	Solution
400	SMN.0056	Parameter: Access policy statement principle is invalid.	Invalid value for access_policy statement principle.	Enter a valid access_policy statement principle value.
400	SMN.0058	Parameter: Access policy statement condition is invalid.	Invalid value for access_policy statement condition.	Enter a valid access_policy statement condition value.
400	SMN.0059	Parameter: job_id is invalid.	Invalid job_id value.	Contact technical support.
400	SMN.0061	Parameter: Service name is invalid.	Invalid Service name value.	Contact technical support.
400	SMN.0062	Parameter: Show name is invalid.	Invalid Show name value.	Contact technical support.
400	SMN.0066	Parameter: System parameter name is invalid.	Invalid System parameter name value.	Contact technical support.
400	SMN.0067	Parameter: System parameter value is invalid.	Invalid value for System parameter value.	Contact technical support.
400	SMN.0072	Parameter: Service is invalid.	Invalid service value.	Enter a valid service value.
400	SMN.0073	Parameter: Invalid action.	Invalid action value.	Enter a valid action value.
400	SMN.0074	Failed to add permission.	Failed to add permissions.	Contact technical support.
400	SMN.0077	Parameter: Status is invalid.	Invalid status value.	Enter a valid status value.
400	SMN.0080	The signId parameter is invalid.	Invalid sign-id value.	Enter a valid sign_id value.

Status Code	Error Codes	Error Message	Description	Solution
400	SMN.0081	The signName parameter is invalid.	Invalid sign-name value.	Enter a valid sign_name value. It is a string of 2 to 8 characters containing only letters and digits.
400	SMN.0082	The length of the remark parameter value has reached the maximum allowed.	Remark too long	Enter a valid remark value that contains no more than 1500 bytes.
400	SMN.0087	The SMS message signature has not been approved.	SMS message signature not approved.	Enter an approved SMS message signature.
400	SMN.0090	Invalid domain ID.	Invalid domain ID.	Enter a valid domain_id value.
400	SMN.0092	The kafka_id parameter is invalid.	Invalid Kafka ID.	Contact technical support.
400	SMN.0093	The address_list parameter is invalid.	Invalid address list.	Contact technical support.
400	SMN.0094	The type of queue parameter is invalid.	Invalid queue parameter type.	Contact technical support.
400	SMN.0095	The count of queue parameter is invalid.	Invalid queue parameter statistics.	Contact technical support.
400	SMN.0097	The names parameter is invalid.	Invalid names value.	Contact technical support.
400	SMN.0100	The eventType parameter is invalid.	Invalid event type.	Enter a valid event_type value.

Status Code	Error Codes	Error Message	Description	Solution
400	SMN.0102	Parameter: message_id is invalid.	Invalid message ID.	Enter a valid message_id value.
400	SMN.0103	The start_time parameter value is invalid.	Invalid start time.	Enter a valid start_time value.
400	SMN.0104	The end_time parameter value is invalid.	Invalid end time.	Enter a valid end_time value.
400	SMN.0108	Parameter: Type is invalid.	Invalid type.	Enter a valid type.
400	SMN.0110	Parameter: Start date is invalid.	Invalid start date.	Enter a valid start_date value.
400	SMN.0112	Parameter: End date is invalid.	Invalid end date.	Enter a valid end_date value.
400	SMN.0113	The start time and end time must be within the past 3 months.	The start time and end time must be within the past 3 months.	The start time and end time must be within the past 3 months.
400	SMN.0114	The end time must be later than the start time.	The end time must be later than the start time.	The end time must be later than the start time.
400	SMN.0115	Parameter: Application name is invalid.	Invalid application name.	Enter a valid application name.
400	SMN.0118	Wrong Certificate.	Certificate error.	Specify a valid certificate.
400	SMN.0123	Parameter: ApplicationUr n is invalid.	Invalid application URN.	Enter a valid application_urn value.

Status Code	Error Codes	Error Message	Description	Solution
400	SMN.0124	Parameter: application attribute is invalid.	Invalid application_tributes value.	Specify a valid application_tributes value.
400	SMN.0126	ContentType is wrong.	Incorrect content type.	Contact technical support.
400	SMN.0129	Certificate type is wrong.	Incorrect certificate type.	Contact technical support.
400	SMN.0132	The value of the User_data parameter is invalid.	Invalid user_data value.	Enter a valid user_data value.
400	SMN.0133	The device token already exists.	Device token already exists.	You cannot create the same device token twice.
400	SMN.0134	The endpoint URN is invalid.	Invalid endpoint URN.	Enter a valid endpoint_urn value.
400	SMN.0135	The endpoint does not exist.	The endpoint does not exist.	Specify a valid endpoint.
400	SMN.0136	The value of the enabled parameter is invalid.	Invalid enabled value.	Enter a valid enabled value.
400	SMN.0137	The application URN is invalid.	Invalid application URN.	Enter a valid application_urn value.
400	SMN.0140	The topic URN configured for the message sending failure event is invalid.	The topic URN configured for the message sending failure event is invalid.	Enter a valid topic_urn value.

Status Code	Error Codes	Error Message	Description	Solution
400	SMN.0141	The topic configured for the message sending failure event does not exist.	The topic URN configured for the message sending failure event does not exist.	Enter a valid topic_urn value.
400	SMN.0142	The topic URN configured for the message sending success event is invalid.	Invalid topic URN.	Enter a valid topic_urn value.
400	SMN.0143	The topic configured for the message sending success event does not exist.	The topic URN configured for the message sending success event does not exist.	Enter a valid topic_urn value.
400	SMN.0144	The topic URN configured for the response message event is invalid.	The topic URN configured for the response message event is invalid.	Enter a valid topic_urn value.
400	SMN.0145	The topic configured for the response message event does not exist.	The topic URN configured for the response message event does not exist.	Enter a valid topic_urn value.
400	SMN.0148	Parameter: user_id is invalid.	Invalid user ID.	Enter a valid user_id value.

Status Code	Error Codes	Error Message	Description	Solution
400	SMN.0150	Complete real-name registration using your company's certificate.	Use your certificate to complete real-name registration.	Contact technical support.
400	SMN.0151	The message signature type cannot be promotional.	The signature cannot be a promotional message signature.	Specify a transactional SMS message signature.
400	SMN.0152	The number allocated to the SMS template has reached the maximum allowed.	SMS templates reached the maximum allowed number.	You can create no more than 100 SMS templates.
400	SMN.0155	Parameter: SmsTemplate Type is invalid.	Invalid SMS template type.	Enter a valid sms_template_type value.
400	SMN.0156	Parameter: SmsTemplate Name is invalid.	Invalid SMS template name.	Enter a valid sms_template_name value.
400	SMN.0157	Parameter: SmsTemplate Content is invalid.	Invalid SMS template content.	Enter a valid sms_template_content value.
400	SMN.0159	The number of endpoints has reached the maximum allowed.	Endpoints reached the quota.	Enter no more than 1,000 phone numbers.
400	SMN.0160	Invalid endpoint.	Invalid endpoint.	Specify a valid endpoint.
400	SMN.0161	Invalid SMS template ID.	Invalid SMS template ID.	Enter a valid sms_template_id value.

Status Code	Error Codes	Error Message	Description	Solution
400	SMN.0188	Invalid SMS template type.	Invalid SMS template type.	The template must be a promotional template.
400	SMN.0189	Failed to obtain the certificate required for reviewing the SMS message template function.	Failed to obtain the certificate required for reviewing the SMS template.	Contact technical support.
400	SMN.0191	Parameter: Invalid enterprise name.	Invalid enterprise name.	Contact technical support.
400	SMN.0192	Parameter: Invalid enterprise certificate ID.	Invalid enterprise certificate.	Contact technical support.
400	SMN.0204	Promotional SMS messages must contain the way to unsubscribe in the end, for example, by replying "TD", or "T".	Promotional SMS messages must explain how recipients can unsubscribe, for example, by replying "unsubscribe".	Promotional SMS messages must explain how recipients can unsubscribe, for example, by replying "unsubscribe".
400	SMN.0215	The SMS message signature ID does not match the signature name in the SMS message template content.	The SMS message signature ID does not match the signature name in the SMS template.	Specify a signature ID that matches the signature name in the template content.



Status Code	Error Codes	Error Message	Description	Solution
400	SMN.0216	The template content does not include any valid SMS message signature.	No valid SMS message signature in the template content.	Enter a valid signature in the template content.
400	SMN.0217	The template content does not include any SMS message signature.	No SMS message signature in the template content.	The SMS template must contain an approved and available signature, for example, [xx mall].
400	SMN.0224	The SMS message template is invalid because the associated signature has been deleted.	The SMS template has expired due to the deletion of the associated signature.	Specify a valid sms_template_id value.
400	SMN.0227	The message contains sensitive words.		Modify the message content.
400	SMN.0230	Parameter: Invalid title.	Invalid title.	Enter a valid title.
400	SMN.0261	Check whether your account balance is sufficient and top up your account if necessary.	Check the account balance and top up your account if necessary.	Check the account balance and top up your account if necessary.
403	SMN.0001	No permission to request resources.	No permissions for the requested resource.	Request the required permissions.
403	SMN.0004	Exceeded topic limit.	Topics exceeded the maximum number allowed.	You can create a maximum of 3,000 topics.

Status Code	Error Codes	Error Message	Description	Solution
403	SMN.0007	Exceeded subscription limit.	Subscriptions exceeded the maximum allowed number.	You can add a maximum of 10,000 subscriptions to a topic.
403	SMN.0008	Parameter: Subject is invalid.	Invalid subject value.	Enter a valid subject value.
403	SMN.0009	Parameter: Message is invalid.	Invalid message.	Enter a valid message value.
403	SMN.0022	Parameter: token is invalid.	Invalid token value.	Specify a valid token.
403	SMN.00308	Policy doesn't allow {} to be performed.	Policy doesn't allow {} to be performed.	Check the SMN permission.
403	SMN.0047	Parameter: Value exceeds the maximum length.	value exceeds the maximum length.	Enter a valid value.
403	SMN.0057	The number of SMS messages exceeds the limit.	SMS messages exceeded the maximum number allowed.	You can send no more than 60 SMS messages to a phone number within one hour and no more than 200 within 12 hours.
403	SMN.0065	The number of email messages exceeds the limit.	Email messages exceeded the maximum number allowed.	Contact technical support.
403	SMN.0069	Not authorized to subscribe internal endpoints.	Subscription endpoint not authorized.	Enter a correct HTTP/HTTPS endpoint.

Status Code	Error Codes	Error Message	Description	Solution
403	SMN.0070	No permission to request resources. The role is op_restricted. Contact customer service.	Insufficient permissions to operate the current resource.	Check the account balance and top up your account if necessary. If the fault persists, contact customer service.
403	SMN.0071	No permission to request resources. Role is op_suspended .	Insufficient permissions to request the current resource. Your role is suspended.	Check whether your account has been frozen.
403	SMN.0075	Parameter: tags are too many.	Tags exceeded the maximum allowed number.	Enter no more than 90 non-repeated tags in a message template.
403	SMN.0078	The maximum number of subscriptions has been reached.	Subscriptions reached the maximum allowed number.	Create a topic.
403	SMN.0083	Finish real-name authentication before continuing.	Complete real-name authentication.	Contact technical support.
403	SMN.0086	The number allocated to the SMS message signature has reached the maximum allowed.	SMS message signatures have reached quota.	You can create no more than 10 SMS message signatures.

Status Code	Error Codes	Error Message	Description	Solution
403	SMN.0099	The SMN service has not been authorized to send messages to this queue.	SMN is not authorized to send messages to this queue.	Grant permissions to SMN in the queue policy.
403	SMN.0116	Platform do not support yet.	Unsupported platform.	Enter a supported platform.
403	SMN.0117	Certificate type is not supported.	Unsupported certificate type.	Enter a supported certificate type.
403	SMN.0119	PlatformPrinciple must be at most 8192 bytes long in UTF-8 encoding.	UTF-8 encoded platform_principle must not exceed 8192 bytes.	Enter a valid, UTF-8 encoded value for platform_principle that does not exceed 8192 bytes.
403	SMN.0120	PlatformCredential must be at most 8192 bytes long in UTF-8 encoding.	UTF-8 encoded platform_credential must not exceed 8192 bytes.	Enter a valid, UTF-8 encoded value for platform_credential that does not exceed 8192 bytes.
403	SMN.0127	File is too large.	Excessive file size.	Contact technical support.
403	SMN.0128	Password is empty.	Password not specified.	Contact technical support.
403	SMN.0131	The value of the Token parameter is invalid.	Invalid token.	Specify a valid token.
403	SMN.0147	Only enterprise users who use the certificate images for authentication can create message signatures.	Only enterprise users who use certificates for identity authentication can create message signatures.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
403	SMN.0153	Only enterprise users can create SMS message Template.	Only enterprise users can create SMS templates.	Complete enterprise authentication.
403	SMN.0154	Only enterprise users who use the certificate images for authentication can create sms message templates.	Only enterprise users who use certificates for identity authentication can create SMS templates.	Contact technical support.
403	SMN.0165	Parameter: tenant_token is invalid.	Invalid tenant token.	Specify a valid tenant_token value.
403	SMN.0195	Complete enterprise real-name authentication first.	Complete real-name authentication.	Complete real-name authentication.
403	SMN.0228	Do not have permission to use this API. Contact customer service to apply for permission.	Insufficient permissions to use this API.	Contact technical support to apply for the permissions required to use this API.
404	SMN.0006	Topic not found.	Topic not found.	The topic does not exist. Create a topic.
404	SMN.0013	Subscription resource not found.	No subscription endpoint found.	Specify a valid subscription endpoint.
404	SMN.0027	Template not found.	Specified template not found.	Using an existing template.
404	SMN.0045	Attribute not found.	Attribute not found.	Specify a valid attribute.

Status Code	Error Codes	Error Message	Description	Solution
404	SMN.0060	Job not found.	Failed to query the job.	Contact technical support.
404	SMN.0063	Cloud service not found.	Cloud service not found.	Contact technical support.
404	SMN.0068	System parameter not found.	System parameter not found.	Contact technical support.
404	SMN.0076	Default message template not found.	The message template using the default protocol does not exist.	Create a message template using the default protocol.
404	SMN.0084	The SMS message signature could not be found.	SMS message signature not found.	Enter an approved SMS message signature.
404	SMN.0091	Default system message template not found.	The message template using the default protocol does not exist.	Create a system template using the default protocol.
404	SMN.0096	Kafka not found.	Failed to find Kafka.	Contact technical support.
404	SMN.0098	This queue does not exist.	The queue does not exist.	Specify a valid DMS queue.
404	SMN.0101	The graph does not exist in the functiongraph service.	The function does not exist in FunctionGraph.	Enter a valid FunctionGraph endpoint.
404	SMN.0109	Start date is not found.	start_date not found.	start_date must be specified.
404	SMN.0111	End date is not found.	end_date not found.	end_date must be specified.
404	SMN.0122	Application not found.	Application not found.	Enter a different application name.

Status Code	Error Codes	Error Message	Description	Solution
404	SMN.0125	Endpoint does not exist.	The endpoint does not exist.	Specify a valid application endpoint.
404	SMN.0130	The application does not exist.	The cloud platform does not exist.	Enter a valid application_urn value.
404	SMN.0162	SMS template not found.	The SMS template does not exist.	Specify a valid SMS template.
404	SMN.0167	Phone number does not exist.	The mobile number does not exist.	Enter a valid phone number.
404	SMN.0168	Email Address does not exist.	The e-mail address does not exist.	Enter a valid email address.
429	SMN.00359	Topic publishing exceeds the flow control limit, please try again later.	The number of messages published by a topic exceeds the traffic control limit.	Try again later.
429	SMN.00362	Topic publishing exceeds the global flow control limit, please try again later.	The number of messages published by a topic exceeds the global traffic control limit.	Try again later.
500	SMN.0016	Database Exceptions.	Database exception.	Contact technical support.
500	SMN.0018	Service internal error.	Internal service error.	Contact technical support.
500	SMN.0089	An error occurred in the BSS system. Try again later.	BSS error. Try again later.	Contact technical support.
500	SMN.0158	Failed to upload the file.	Failed to upload the file.	Contact technical support.

# B Change History

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Date	Description
2022-09-30	This issue is the first official release.