

Message & SMS

API Reference

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1 Before You Start

1.1 Overview

Message & SMS is a communication service provided by Huawei Cloud together with global carriers and channels for enterprise users. Enterprises can call APIs or use Group SMS Assistant to send verification code and notification SMSs.

This section describes Message & SMS APIs, parameters, and examples. For details about all supported operations, see [API Overview](#).

Before calling an API, ensure that you are familiar with basic concepts of Message & SMS. For details, see Service Overview.

1.2 API Calling

Message & SMS supports Representational State Transfer (REST) APIs, allowing you to call APIs using HTTPS and domain names (do not use IP addresses). For details about API calling, see [API](#).

1.3 Constraints

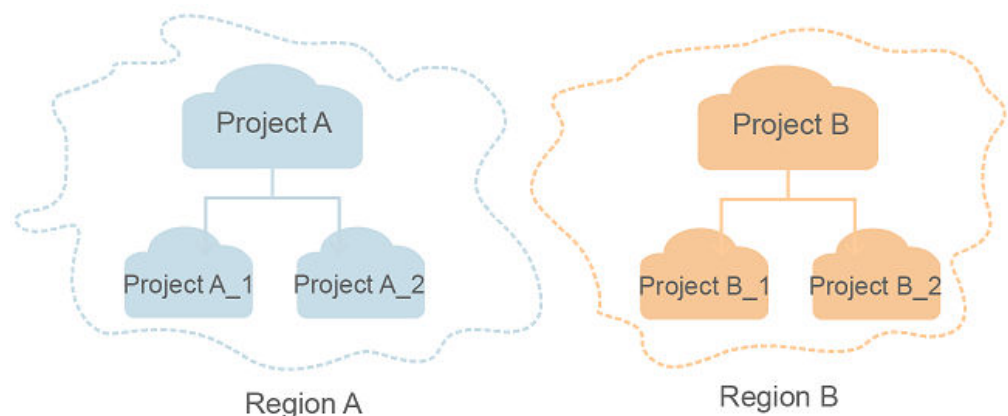
- For details about the relationship between SMS applications and templates, and restrictions, see Resource Introduction.
- For details about constraints, see API descriptions.

1.4 Concepts

- Account
An account is created upon successful registration with Huawei Cloud. The account has full access permissions for all of its cloud services and resources. It can be used to reset user passwords and grant user permissions. The account is a payment entity and should not be used to perform routine management. For security purposes, create IAM users and grant them permissions for routine management.

- **User**
An Identity and Access Management (IAM) user is created using an account to use cloud services. Each IAM user has its own identity credentials (password and access keys).
The domain name, username, and password will be required for API authentication.
- **Region**
Regions are divided from the dimensions of 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 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.
- **Availability zone (AZ)**
An AZ comprises one or more physical data centers equipped with independent cooling, fire extinguishing, moisture-proof, and electricity facilities. Computing, network, storage, and other resources in an AZ are logically divided into multiple clusters. AZs within a region are connected using high-speed optical fibers to support cross-AZ high-availability systems.
- **Project**
Projects group and isolate resources (including compute, storage, and network resources) across physical regions. A default project is provided for each Huawei Cloud region, and subprojects can be created under each default project. Users can be granted permissions to access all resources in a specific project. If you need more refined access control, create subprojects under a default project and create resources in subprojects. Then you can assign users the permissions required to access only the resources in the specific subprojects.

Figure 1-1 Project isolation model



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

For more information about enterprise projects and how to obtain enterprise project IDs, see the *Enterprise Management User Guide*.

2 API Overview

Message & SMS provides APIs for creating, deleting, modifying, and querying applications and templates, and APIs for sending SMSs and receiving uplink SMSs.

Table 2-1 APIs

Type	Subtype	Description
Application and template APIs	SMS application APIs	Used to query, create, and modify SMS applications, query the number of applications, and obtain application details.
	SMS template APIs	Used to query, create, modify, delete SMS templates, obtain template details, query countries or regions to which SMSs are sent, and query template variables.
SMS sending and receiving APIs	SMS sending API	Used to send SMSs with the same content to one or more users.
	Batch SMS sending API	Used to send SMSs with different contents to different users.
	Status report receiving API	Used to receive SMS sending status reports.

3 APIs

3.1 Application and Template APIs

3.1.1 Calling APIs

3.1.1.1 Making an API Request

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

Request URI

The format of a request URI is as follows:

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

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

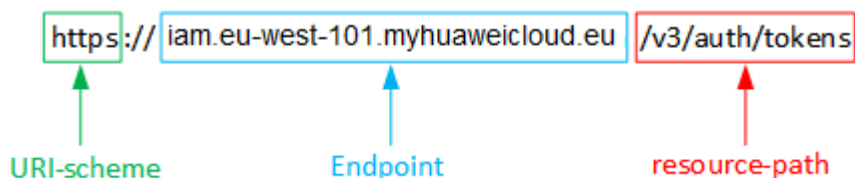
Table 3-1 Parameters in a URI

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 details about Message & SMS endpoints, see Obtaining an Endpoint .
resource-path	Resource path, that is, API access path. Obtain the path from the URI of an API. For example, the resource-path of the API for obtaining a user token is /v3/auth/tokens .

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

For example, to obtain an IAM token in the European region, obtain the endpoint of IAM (**iam.eu-west-101.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:

Figure 3-1 Example URI



NOTE

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

Method

HTTP 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 a server to return specified resources.
PUT	Requests a server to update specified resources.
POST	Requests a server to add resources or perform a special operation.
DELETE	Requests the server to delete specified resources, for example, an object.
HEAD	Requests a server for resource header.
PATCH	Requests a server to update part of specified resources. If the requested resource does not exist, the server may create a resource using the PATCH method.

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.eu-west-101.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.

Table 3-3 lists common request header fields.

Table 3-3 Common request header

Parameter	Description	Mandatory	Example
Host	Server information of the resource being requested. The value can be obtained from the URL of the service API. The value is in the format of <i>Hostname.Port number</i> . If the port number is not specified, the default port is used. The default port number for HTTPS is 443 .	No This parameter is mandatory for AK/SK authentication.	code.test.com or code.test.com:443
Content-Type	Message body type or format. The default value application/json is recommended. Other values of this field will be provided for specific APIs if any.	Yes	application/json
Content-Length	Length of a request body, in bytes.	No	3495

Parameter	Description	Mandatory	Example
X-Project-Id	Project ID. Obtain it by referring to Obtaining a Project ID .	No This field is mandatory for requests that use AK/SK authentication in the Dedicated Cloud (DeC) scenario or multi-project scenario.	e9993fc787d94b6c886cb aa340f9c0f4
X-Auth-Token	User token. The user token is a response to the API used to obtain a user token . This API is the only one that does not require authentication. After the request is processed, the value of X-Subject-Token in the response header is the token value.	No This parameter is mandatory for token authentication.	The following is part of an example token: MIIPAgYJKoZIhvcNAQc- Co...ggg1BBIINPXsidG9rZ

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.eu-west-101.myhuaweicloud.eu/v3/auth/tokens
Content-Type: application/json
```

(Optional) Request Body

The request body is optional. A request body is often sent in a structured format (for example, JSON or XML) as defined in the **Content-Type** header field. If the request body contains full-width characters, these characters must be coded in UTF-8.

Request bodies vary depending on APIs. Some APIs do not require a 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*, ******* (login password), *domainname* (account name), and *xxxxxxxxxxxxxxxxxxxx* (project

name, for example, **ap-southeast-1**) with the actual values. For details about how to obtain the values, see Obtaining Account, IAM User, Group, Project, Region, and Agency Information.

NOTE

The **scope** parameter specifies where a token takes effect. 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.eu-west-101.myhuaweicloud.com/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 an API through [curl](#), [Postman](#), or coding. In the response to the API used to [obtain a user token](#), **x-subject-token** is the target user token. You can use this token to authenticate the calling of other APIs.

3.1.1.2 Authentication

API calling requests must be authenticated using tokens.

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 for obtaining 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. Obtain it by calling the API for [obtaining user token](#).

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

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

Message & SMS is a project-level service. When you call the API for **obtaining a user token**, set **auth.scope** in the request body to **project**.

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

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

```
POST https://iam.eu-west-101.myhuaweicloud.com/v3/auth/projects
Content-Type: application/json
X-Auth-Token: ABCDEFJ....
```

3.1.1.3 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 2xx to 4xx. It indicates the status of a request. For more information, see [Status Codes](#).

For example, if status code **201** is returned after you call an API 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 3-2 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. You can use this token to authenticate the calling of other APIs.

Figure 3-2 Header for the API used to obtain 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
→ MIIYXQYJKoZIhvcNAQcCoIIYtjCCGEoCAQExDTALBgIghkgBZQMEAgEwgharBgkqhkiG9w0BBwGgghacBIIWmHsidG9rZW4iOnsiZXhwaXJlc19hdCI6IiwMTktMDItMTNUMC
fj3KJs6YgKnpVNRbW2eZ5eb78SZOkajACgkIQ1wi4JIGzrpd18LGXK5bdfq4lqHCYb8P4NaY0NYejcAgz/VeFYtLWT1GSO0zxKZmlQHq82HBqHdgIZO9fuEbL5dMhdavj+33wEI
xHRCE9I87o+k9-
j+CMZSEB7bUGd5Uj6eRASXl1jipPEGA270g1FruooL6jgglFkNPQuFSOU8+uSsttVwRtnfsC+qTp22Rkd5MCqFGQ8LcuUxC3a+9CM8nOintWW7oeRUvhVpxk8pxiX1wTEboX-
RzT6MUbpvGw-oPNFYxJECKnoH3Hrozv0vN--n5d6Nbxg==

x-xss-protection → 1; mode=block;

```

https://support.huaweicloud.com/eu/api-iam/iam_30_0001.html

(Optional) Response Body

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

The following is part of the response body for the API used to obtain a user token. The following describes part of the response body.

```

{
  "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 error message will be displayed. The following shows an error response body:

```

{
  "error_msg": "The format of message is error",
  "error_code": "AS.0001"
}

```

3.1.2 Obtaining Required Information

3.1.2.1 Obtaining an Endpoint

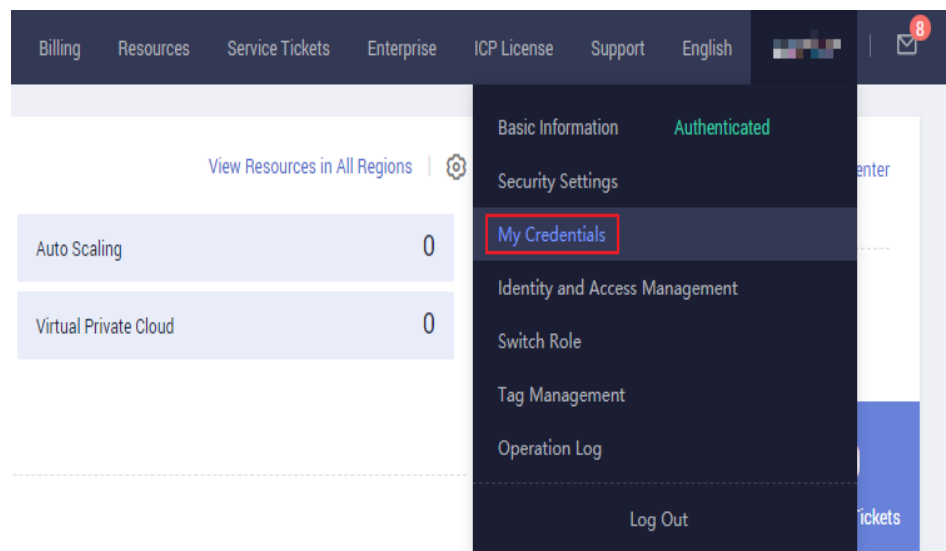
The Message & SMS endpoint is as follows:

Parameter	Description
Endpoint Web	Available endpoint for Message & SMS: Europe: msgsms.eu-west-101.myhuaweicloud.eu NOTE Only domain names can be used to obtain the endpoint.

3.1.2.2 Obtaining Account, User, and Project Information

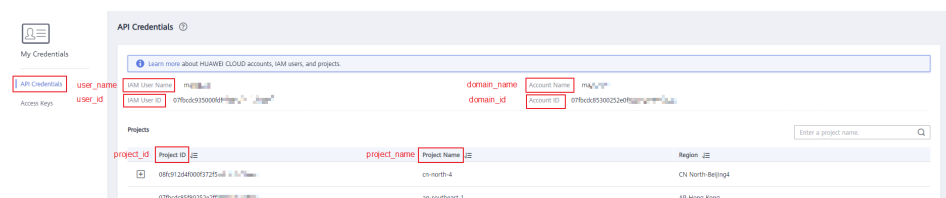
- Using the console
 - On the Huawei Cloud homepage, click **Console** in the upper right corner.
 - Hover over the username in the upper right corner and choose **My Credentials**.

Figure 3-3 My Credentials



- View the account name, account ID, username, user ID, project name, and project ID on the **API Credentials** page.

Figure 3-4 Viewing the account, user, and project information



- Calling an API
 - For details about how to obtain a user ID, see Listing IAM Users.
 - For details about how to obtain a project ID, see Querying Project Information.

3.1.3 SMS Application APIs

3.1.3.1 Querying an SMS Application

Function

This API is used to query information about a created application.

URI

GET /v2/{project_id}/msgsms/apps

Table 3-4 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see Obtaining Account, User, and Project Information .

Table 3-5 Query parameters

Parameter	Mandatory	Type	Description
app_name	No	String	Application name.
end_time	No	String	End time.
limit	No	Integer	Quantity.
offset	No	Integer	Offset.
region	No	String	Region. intl: international
sort_dir	No	String	Sorting method. desc: The query results are displayed in the descending order. asc: The query results are displayed in ascending order.
sort_key	No	String	Sorting field.
start_time	No	String	Start time.
status	No	String	Status.

Request Parameters

Table 3-6 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Request body parameter type. This parameter must be set to application/json .
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is a token.

Response Parameters

Status code: 200

Table 3-7 Response body parameters

Parameter	Type	Description
results	Array of SmsAppQueryResp	Query result.
total	Long	Total number.

Table 3-8 SmsAppQueryResp response parameters

Parameter	Description
id	Primary key ID of the application. It is unique and is used to obtain and modify the application.
create_time	Creation time.
update_time	Update time.
customer_id	Customer ID.
resource_id	Resource ID.
developer_account	Developer account.
app_name	Application name.
app_key	Application key.

Parameter	Description
status	Application status. CREATED: pending (to be brought online). The application has not been created. Wait for a while. SUSPENDED: suspended. Service requests cannot be initiated. If the SMS content sent violates service rules or you apply to unsubscribe from the Message & SMS service, the operation manager will suspend your SMS application. LAUNCHED: normal. The application is added and can be used properly.
region	Region.
intl_channel_num	SMS channel number.
enterprise_project_id	Enterprise project ID.
enterprise_project_name	Enterprise project name.
app_access_addr	Access address.
protocol	Protocol.
platform	Platform.

Request Example

```
GET /v2/845ada5bc7444f1295cd517af0123da1/msgsms/apps?app_name=auto_test789
Host: 100.85.***.***:30300
Content-Type: application/json
X-Auth-Token:*****
```

Response Example

```
{
  "results": [
    {
      "id": "9e61f59c-1a6b-4ee5-9651-5bca450694b3",
      "create_time": "2022-08-12 06:51:17",
      "update_time": "2022-08-12 06:51:17",
      "customer_id": "*****c55c3c4526b2ed7a0213bc9871",
      "tenant": {
        "customer_id": "*****c55c3c4526b2ed7a0213bc9871",
        "customer_name": "****05",
        "enterprise_name": "Huawei Technologies Co., Ltd."
      },
      "resource_id": "*****8a-a690-4e14-a1c7-2430937336d0",
      "developer_account": "*****66_sms",
      "app_name": "auto_test789",
      "omp_app_name": "*****4877bf46b5906a3240636bc7aa",
      "app_key": "*****3baZf4c856O4Qrbqvui3K2",
      "status": "LAUNCHED",
      "industry": 14,
      "region": "intl",
    }
  ]
}
```

```

    "intl_channel_num": "*****886739",
    "enterprise_project_id": "0",
    "enterprise_project_name": "default",
    "app_access_addr": "https://100.**.***.**:8443",
    "protocol": "HTTP",
    "platform": "NFV",
    "is_support_multiomp": false
  }
],
"total": 1
}

```

Returned Values

Status Code	Description
200	OK
401	Unauthorized
403	Forbidden
404	Not Found
500	System error

3.1.3.2 Creating an SMS Application

Function

This API is used to create an application.

URI

POST /v2/{project_id}/msgsms/apps

Table 3-9 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see Obtaining Account, User, and Project Information .

Request Parameters

Table 3-10 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is a token.
Content-Type	Yes	String	Request body parameter type. This parameter must be set to application/json .

Table 3-11 Request body parameters

Parameter	Mandatory	Type	Description
app_name	Yes	String	Application name.
region	Yes	String	Region. intl: international

Response Parameters

Status code: 200

Table 3-12 Response body parameters

Parameter	Type	Description
app_key	String	Application key.
app_name	String	Application name.
id	String	Primary key ID of the application.

Request Example

```
POST /v2/845ada5bc7444f1295cd517af0123da1/msgsms/apps
Host: 100.85.***.***:30300
Content-Type: application/json
X-Auth-Token:*****
Content-Length: 144

{
  "app_name": "auto_test789",
  "region": "intl"
}
```

Response Example

```
{
  "id": "9e61f59c-1a6b-4ee5-9651-5bca450694b3",
  "app_key": "*****3baZf4c856O4Qrbqvui3K2",
  "app_name": "auto_test789"
}
```

Returned Values

Status Code	Description
200	OK
201	Created
401	Unauthorized
403	Forbidden
404	Not Found
500	System error

3.1.3.3 Querying the Number of Applications

Function

This API is used to query the number of used applications.

URI

GET /v2/{project_id}/msgsms/apps-count

Table 3-13 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see Obtaining Account, User, and Project Information .

Table 3-14 Query parameter

Parameter	Mandatory	Type	Description
region	Yes	String	Region. intl: international

Request Parameters

Table 3-15 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Request body parameter type. This parameter must be set to application/json .
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is a token.

Response Parameters

Status code: 200

Table 3-16 Response body parameters

Parameter	Type	Description
total	Integer	Total number.
used	Integer	Number of used applications.

Request Example

```
GET /v2/845ada5bc7444f1295cd517af0123da1/msgsms/apps-count?region=cn
Host: 100.85.***.***:30300
Content-Type: application/json
X-Auth-Token:*****
```

Response Example

```
{
  "total": 395,
  "used": 108
}
```

Returned Values

Status Code	Description
200	OK
401	Unauthorized
403	Forbidden
404	Not Found

Status Code	Description
500	System error

3.1.3.4 Obtaining Application Details

Function

This API is used to query application details.

URI

GET /v2/{project_id}/msgsms/apps/{id}

Table 3-17 URI parameters

Parameter	Mandatory	Type	Description
id	Yes	String	Primary key ID of the application. For details, see id in Table 3-8 .
project_id	Yes	String	Project ID. For details, see Obtaining Account, User, and Project Information .

Request Parameters

Table 3-18 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Request body parameter type. This parameter must be set to application/json .
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is a token.

Response Parameters

Status code: 200

Table 3-19 Response body parameters

Parameter	Description
id	Primary key ID of the application.
create_time	Creation time.
update_time	Update time.
customer_id	Customer ID.
resource_id	Resource ID.
developer_account	Developer account.
app_name	Application name.
app_key	Application key.
status	Application status. • CREATED: pending (to be brought online). The application has not been created. Wait for a while. • SUSPENDED: suspended. Service requests cannot be initiated. If the SMS content sent violates service rules or you apply to unsubscribe from the Message & SMS service, the operation manager will suspend your SMS application. • LAUNCHED: normal. The application is added and can be used properly.
region	Region.
intl_channel_number	European SMS channel number.
enterprise_project_id	Enterprise project ID.
enterprise_project_name	Enterprise project name.
app_access_address	Access address.
protocol	Protocol.
platform	Platform.

Request Example

```
GET /v2/845ada5bc7444f1295cd517af0123da1/msgsms/apps/9e61f59c-1a6b-4ee5-9651-5bca450694b3
Host: 100.85.***.***:30300
Content-Type: application/json
X-Auth-Token:*****
```

Response Example

```
{
  "id": "9e61f59c-1a6b-4ee5-9651-5bca450694b3",
  "create_time": "2022-08-12 06:51:17",
  "update_time": "2022-08-12 06:51:17",
  "customer_id": "*****c55c3c4526b2ed7a0213bc9871",
  "tenant": {
    "customer_id": "*****c55c3c4526b2ed7a0213bc9871",
    "customer_name": "****05",
    "enterprise_name": "Huawei Technologies Co., Ltd."
  },
  "resource_id": "*****8a-a690-4e14-a1c7-2430937336d0",
  "developer_account": "****66_sms",
  "app_name": "auto_test789",
  "omp_app_name": "*****4877bf46b5906a3240636bc7aa",
  "app_key": "*****3baZf4c856O4Qrbqvui3K2",
  "status": "LAUNCHED",
  "industry": 14,
  "region": "intl",
  "intl_channel_num": "*****886739",
  "enterprise_project_id": "0",
  "enterprise_project_name": "default",
  "protocol": "HTTP",
  "platform": "NFV",
  "is_support_multiomp": false
}
```

Returned Values

Status Code	Description
200	OK
401	Unauthorized
403	Forbidden
404	Not Found
500	System error

3.1.3.5 Modifying an SMS Application

Function

This API is used to modify application information.

URI

PUT /v2/{project_id}/msgsms/apps/{id}

Table 3-20 URI parameters

Parameter	Mandatory	Type	Description
id	Yes	String	Primary key ID of the application. For details, see id in Table 3-8 .
project_id	Yes	String	Project ID. For details, see Obtaining Account, User, and Project Information .

Request Parameters

Table 3-21 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Request body parameter type. This parameter must be set to application/json .
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is a token.

Table 3-22 Request body parameters

Parameter	Mandatory	Type	Description
app_name	Yes	String	Application name.
region	Yes	String	Region. intl: international

Response Parameters

Status code: 200

Table 3-23 Response body parameters

Parameter	Type	Description
app_key	String	Application key.
app_name	String	Application name.

Parameter	Type	Description
id	String	Primary key ID of the application.

Request Example

```
PUT /v2/845ada5bc7444f1295cd517af0123da1/msgsms/apps/9e61f59c-1a6b-4ee5-9651-5bca450694b3
Host: 100.85.***.***:30300
Content-Type: application/json
X-Auth-Token:*****
Content-Length: 148

{
  "app_name": "auto_test7890",
  "region": "intl"
}
```

Response Example

```
{
  "id": "*****9c-1a6b-4ee5-9651-5bca450694b3",
  "app_key": "*****3baZf4c856O4Qrbqvui3K2",
  "app_name": "auto_test7890"
}
```

Returned Values

Status Code	Description
200	OK
201	Created
401	Unauthorized
403	Forbidden
404	Not Found
500	System error

3.1.4 SMS Template APIs

3.1.4.1 Querying the Country or Region to Which SMSs Are Sent

Function

This API is used to query the country or region to which SMSs are sent.

URI

GET /v2/{project_id}/msgsms/country

Table 3-24 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see Obtaining Account, User, and Project Information .

Table 3-25 Query parameters

Parameter	Mandatory	Type	Description
country_name_en	No	String	Country or region name (English).
country_name_zh	No	String	Country or region name (Chinese).

Request Parameters

Table 3-26 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Request body parameter type. This parameter must be set to application/json .
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is a token.

Response Parameters

Table 3-27 SmsCountryResp response parameters

Parameter	Description
country_id	Country or region ID.
country_name_en	Country or region name (English).
country_name_zh	Country or region name (Chinese).

Request Example

```
GET /v2/845ada5bc7444f1295cd517af0123da1/msgsms/country?country_name_en=Afghanistan
Host: 100.85.***.***:30300
Content-Type: application/json
X-Auth-Token:*****
```

Response Example

```
[
  {
    "country_name_en": "Afghanistan",
    "country_name_zh": "Afghanistan"
  }
]
```

Returned Values

Status Code	Description
200	OK
401	Unauthorized
403	Forbidden
404	Not Found
500	System error

3.1.4.2 Querying an SMS Template

Function

This API is used to query information about a created template.

URI

GET /v2/{project_id}/msgsms/templates

Table 3-28 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see Obtaining Account, User, and Project Information .

Table 3-29 Query parameters

Parameter	Mandatory	Type	Description
app_key	No	String	Application key.

Parameter	Mandatory	Type	Description
app_name	No	String	Application name.
end_time	No	String	End time.
flow_status	No	String	Process status. • Adopted: approved • Reviewing: under review • Reject: rejected
has_variable	No	String	Whether the template contains variables.
limit	No	Integer	Quantity.
offset	No	Integer	Offset.
region	No	String	Region.
sort_dir	No	String	Sorting method. • desc: The query results are displayed in the descending order. • asc: The query results are displayed in ascending order.
sort_key	No	String	Sorting field.
start_time	No	String	Start time.
template_id	No	String	Template ID.
template_name	No	String	Template name.
template_type	No	String	Template type. • VERIFY_CODE_TYPE: verification code • NOTIFY_TYPE: notification

Request Parameters

Table 3-30 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Request body parameter type. This parameter must be set to application/json .

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

Response Parameters

Status code: 200

Table 3-31 Response body parameters

Parameter	Type	Description
results	Array of SmsTemplateResp	Query result.
total	Long	Total number.

Table 3-32 SmsTemplateResp parameters

Parameter	Description
id	Primary key ID of the template. It is unique and is used to obtain, modify, and delete the template and query template variables.
template_name	Template name.
template_type	Template type.
template_content	Template content.
template_id	ID of the OMP-synchronized template.
app_key	Application key.
create_time	Creation time.
customer_id	Customer ID.
has_variable	Whether the template contains variables.
flow_status	Process status.
status	Template status.
universal_template	Whether the template is a general template.
review_desc	Review description.

Parameter	Description
country_name	Country or region.

Request Example

```
GET /v2/845ada5bc7444f1295cd517af0123da1/msgsms/templates?template_name=auto_test789
Host: 100.85.***.***:30300
Content-Type: application/json
X-Auth-Token: ****
```

Response Example

```
{
  "results": [
    {
      "create_time": "2022-08-12 07:40:36",
      "customer_id": "*****c55c3c4526b2ed7a0213bc9871",
      "tenant": {
        "customer_id": "*****c55c3c4526b2ed7a0213bc9871",
        "customer_name": "****05",
        "enterprise_name": "Huawei Technologies Co., Ltd."
      },
      "id": "*****27-37eb-4229-bee9-0eba4d8a897f",
      "template_type": "NOTIFY_TYPE",
      "template_name": "auto_test789",
      "app_name": "auto_test7890",
      "app_key": "*****3baZf4c856O4Qrbqvui3K2",
      "sign_id": "*****b9-4141-4e2d-9838-14889c32a4bf",
      "template_content": "Test",
      "has_variable": "No",
      "flow_status": "Reviewing",
      "status": "Normal",
      "universal_template": 0,
      "region": "intl",
      "brackets": "GB",
      "site": "cn",
      "urge_status": "NO",
      "is_support_multiomp": false,
      "country_name": ""
    }
  ],
  "total": 1
}
```

Returned Values

Status Code	Description
200	OK
401	Unauthorized
403	Forbidden
404	Not Found
500	System error

3.1.4.3 Creating an SMS Template

Function

This API is used to create a template.

URI

POST /v2/{project_id}/msgsms/templates

Table 3-33 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see Obtaining Account, User, and Project Information .

Request Parameters

Table 3-34 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Request body parameter type. This parameter must be set to application/json .
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is a token.

Table 3-35 Request body parameters

Parameter	Mandatory	Type	Description
app_id	Yes	String	Primary key ID of the application. For details, see id in Table 3-8 .
brackets	No	String	Bracket type. Enumerated values: CN: Chinese type GB: English type
region	Yes	String	Region. intl: international

Parameter	Mandatory	Type	Description
send_country	No	Array of integers	List of IDs of countries or regions to which SMSs are sent. It can be obtained from Table 3-27 . This parameter is mandatory when region is set to eu .
template_content	Yes	String	Template content. Read Template and Variable Specifications and Sample Template carefully before configuring this parameter.
template_desc	No	String	Template description.
template_name	Yes	String	Template name.
universal_template	No	Integer	Whether the template is a general template. 0: non-general template 1: general template

Response Parameters

Table 3-36 Response body parameters

Parameter	Type	Description
id	String	Primary key ID of the template.
template_name	String	Template name.

Request Example

```
POST /v2/845ada5bc7444f1295cd517af0123da1/msgsms/templates
Host: 100.85.xxx.xxx:30300
Content-Type: application/json
X-Auth-Token: ****
Content-Length: 308

{
  "app_id": "*****9c-1a6b-4ee5-9651-5bca450694b3",
  "brackets": "GB",
  "region": "intl",
  "sign_id": "*****10-c3fb-427e-965c-a98ae844c5bd",
  "template_content": "Test",
  "template_name": "auto_test789",
  "template_type": "NOTIFY_TYPE",
  "universal_template": 0
}
```

Response Example

```
{
  "id": "*****27-37eb-4229-bee9-0eba4d8a897f",
  "template_name": "auto_test789"
}
```

Returned Values

Status Code	Description
200	OK
201	Created
401	Unauthorized
403	Forbidden
404	Not Found
500	System error

3.1.4.4 Obtaining Template Details

Function

This API is used to query details about a created template.

URI

GET /v2/{project_id}/msgsms/templates/{id}

Table 3-37 URI parameters

Parameter	Mandatory	Type	Description
id	Yes	String	Primary key ID of the template, which is the value of id in Table 3-32 .
project_id	Yes	String	Project ID. For details, see Obtaining Account, User, and Project Information .

Request Parameters

Table 3-38 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Request body parameter type. This parameter must be set to application/json .
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is a token.

Response Parameters

Status code: 200

Table 3-39 Response body parameters

Parameter	Description
id	Primary key ID of the template.
template_name	Template name.
template_type	Template type.
template_content	Template content.
template_id	Template ID.
app_key	Application key.
create_time	Creation time.
customer_id	Customer ID.
has_variable	Whether the template contains variables.
flow_status	Process status.
status	Template status.
universal_template	Whether the template is a general template.
review_desc	Review description.
country_name	Country or region.

Request Example

```
GET /v2/845ada5bc7444f1295cd517af0123da1/msgsms/templates/460a2427-37eb-4229-bee9-0eba4d8a897f
```

```
Host: 100.85.***.***:30300
Content-Type: application/json
X-Auth-Token:*****
```

Response Example

```
{
  "create_time": "2022-08-12 07:40:36",
  "customer_id": "*****c55c3c4526b2ed7a0213bc9871",
  "tenant": {
    "customer_id": "*****c55c3c4526b2ed7a0213bc9871",
    "customer_name": "*****05",
    "enterprise_name": "Huawei Technologies Co., Ltd."
  },
  "id": "*****27-37eb-4229-bee9-0eba4d8a897f",
  "template_type": "NOTIFY_TYPE",
  "template_name": "auto_test789",
  "app_name": "auto_test7890",
  "app_key": "*****3baZf4c856O4Qrbqvui3K2",
  "sign_id": "*****b9-4141-4e2d-9838-14889c32a4bf",
  "template_content": "Test",
  "has_variable": "No",
  "flow_status": "Reviewing",
  "status": "Normal",
  "universal_template": 0,
  "region": "intl",
  "brackets": "GB",
  "site": "cn",
  "is_support_multiomp": false
}
```

Returned Values

Status Code	Description
200	OK
401	Unauthorized
403	Forbidden
404	Not Found
500	System error

3.1.4.5 Modifying an SMS Template

Function

This API is used to modify template information. Currently, only rejected SMS templates can be modified.

URI

PUT /v2/{project_id}/msgsms/templates/{id}

Table 3-40 URI parameters

Parameter	Mandatory	Type	Description
id	Yes	String	Primary key ID of the template, which is the value of id in Table 3-32 .
project_id	Yes	String	Project ID. For details, see Obtaining Account, User, and Project Information .

Request Parameters

Table 3-41 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Request body parameter type. This parameter must be set to application/json .
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is a token.

Table 3-42 Request body parameters

Parameter	Mandatory	Type	Description
app_id	Yes	String	Primary key ID of the application. For details, see id in Table 3-8 .
brackets	No	String	Bracket type. Enumerated values: CN: Chinese type GB: English type
region	Yes	String	Region. intl: international
send_country	No	Array of integers	List of IDs of countries or regions to which SMSs are sent. Obtain this parameter from Table 3-27 . This parameter is valid when region is set to eu .

Parameter	Mandatory	Type	Description
template_content	Yes	String	Template content.
template_desc	No	String	Template description.
template_name	Yes	String	Template name.
template_type	Yes	String	Template type. Enumerated values: • VERIFY_CODE_TYPE: verification code • NOTIFY_TYPE: notification
universal_template	No	Integer	Whether the template is a general template. • 0: non-general template • 1: general template

Response Parameters

Status code: 200

Table 3-43 Response body parameters

Parameter	Description
id	Primary key ID of the template.
template_name	Template name.

Request Example

```
PUT /v2/845ada5bc7444f1295cd517af0123da1/msgsms/templates/c3f641aa-4e87-4a70-b84d-a2d685599072 HTTP/1.1
Host: 100.85.***.***:30300
Content-Type: application/json
X-Auth-Token: ***
Content-Length: 311

{
  "app_id": "*****9c-1a6b-4ee5-9651-5bca450694b3",
  "brackets": "GB",
  "region": "intl",
  "sign_id": "*****58-e866-4b30-9ca5-a476a00e8775",
  "template_content": "Test",
  "template_name": "auto_test000",
  "template_type": "NOTIFY_TYPE",
  "universal_template": 0
}
```

Response Example

```
{
  "id": "*****aa-4e87-4a70-b84d-a2d685599072",
  "template_name": "auto_test000"
}
```

Returned Values

Status Code	Description
200	OK
201	Created
401	Unauthorized
403	Forbidden
404	Not Found
500	System error

3.1.4.6 Deleting an SMS Template

Function

This API is used to delete a template.

URI

DELETE /v2/{project_id}/msgsms/templates/{id}

Table 3-44 URI parameters

Parameter	Mandatory	Type	Description
id	Yes	String	Primary key ID of the template, which is the value of id in Table 3-32 .
project_id	Yes	String	Project ID. For details, see Obtaining Account, User, and Project Information .

Request Parameters

Table 3-45 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Request body parameter type. This parameter must be set to application/json .
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is a token.

Request Example

```
DELETE /v2/845ada5bc7444f1295cd517af0123da1/msgsms/templates/c93e35f5-97c7-4954-
b426-2cbf344a748f
Host: 100.85.***.***:30300
Content-Type: application/json
X-Auth-Token: ****
```

Returned Values

Status Code	Description
200	OK
204	No Content
401	Unauthorized
403	Forbidden
500	System error

3.1.4.7 Querying Template Variables

Function

This API is used to query template variables.

URI

GET /v2/{project_id}/msgsms/templates/{id}/varilable

Table 3-46 URI parameters

Parameter	Mandatory	Type	Description
id	Yes	String	Primary key ID of the template, which is the value of id in Table 3-32 .
project_id	Yes	String	Project ID. For details, see Obtaining Account, User, and Project Information .

Request Parameters

Table 3-47 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Request body parameter type. This parameter must be set to application/json .
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is a token.

Response Parameters

Table 3-48 Response body parameters

Parameter	Type	Description
results	Array of ApiTemplateVariable	Query result.
total	Long	Total number.

Table 3-49 ApiTemplateVariable

Parameter	Description
id	Variable ID.
temp_name	Template name.

Parameter	Description
variable_index	Variable index.
variable_type	Variable type.
variable_length	Variable length.
variable_desc	Variable description.

Request Example

```
GET /v2/845ada5bc7444f1295cd517af0123da1/msgsms/templates/
f063a294-06ab-420e-90bc-0c4dd9aed540/varilable
Host: 100.85.***.***:30300
Content-Type: application/json
X-Auth-Token:*****
```

Response Example

```
{
  "results": [
    {
      "id": 15003394,
      "user_name": null,
      "temp_name": "Test",
      "variable_index": 1,
      "variable_type": "URL",
      "variable_length": 99,
      "variable_desc": ""
    }
  ],
  "total": 1
}
```

Returned Values

Status Code	Description
200	OK
401	Unauthorized
403	Forbidden
404	Not Found
500	System error

3.2 SMS Sending and Receiving APIs

3.2.1 Calling APIs

3.2.1.1 Authentication

AK/SK or X-WSSE authentication is required for calling APIs.

NOTICE

AK/SK authentication mode is recommended because the algorithm is more secure.

AK/SK Authentication (Recommended)

NOTE

- AK/SK authentication supports API requests with a body not larger than 12 MB.
- The method of obtaining the AK, SK, and endpoint in this authentication is different from that in common AK/SK authentication.

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

- Application Key (AK): access key ID, which is a unique identifier used in conjunction with a secret access key to sign requests cryptographically.
- Application Secret (SK): a key used together with the AK to sign requests. The AK and SK identify senders and prevent requests from being altered.

You can sign requests using an AK/SK based on the signature algorithm or using the signing SDK. This document provides signature SDKs and API calling examples in multiple languages, such as Java, Go, Python, and C. You can find the language you need in [Signing SDKs and Demo](#) and integrate the SDK into your application by referring to the examples and API calling description. Replace the **AK/SK** in the demos with the **Application Key** and **Application Secret** obtained from the Message & SMS console, and replace the **Endpoint/HOST** with the application access addresses. **X-Project-Id**, **X-Domain-Id**, and **Project_Id** are not involved.

NOTICE

Unlike the SDKs provided by services, the signing SDK is used only for signing.

X-WSSE Authentication

X-WSSE authentication is used for calling SMS sending APIs. The X-WSSE token is a string with a single HTTP header line.

X-WSSE format: **UsernameToken** **Username**="Application key value",
PasswordDigest="Value of PasswordDigest", **Nonce**="Random string",
Created="Time when the random string is generated"

- **PasswordDigest**: The value is generated based on **Base64 (SHA256 (Nonce + Created + Password))**. The string consisting of **Nonce**, **Created**, and **Password** is SHA256 encrypted and does not contain plus signs (+) or spaces. **Password** indicates the value of application secret.

- **Nonce:** When a platform user sends a request, a 1–128 character string with letters and digits is generated, for example, **66C92B11FF8A425FB8D4CCFE0ED9ED1F**.
- **Created:** indicates the time when the random string is generated. Standard UTC is used, for example, **2018-02-12T15:30:20Z**. The time formats vary by programming language. For details, see [Table 3-52](#).

When you call SMS sending APIs, add the obtained X-WSSE token to the request header by referring to the following example:

```
POST /sms/batchSendSms/v1 HTTP/1.1
x-real-ip: 10.10.10.10
x-real-port: 10443
host: ompap.inner
content-length: 184
date: Fri, 13 Apr 2018 06:31:39 GMT
authorization: WSSE realm="SDP",profile="UsernameToken",type="Appkey"
x-wsse: UsernameToken
Username="ARBRz4bAXoFgEH7o4Ew308eXc1RA",PasswordDigest="NDA1MWlwNjljZ2ZkyNWFlM2FhMTE5ND
E1YTk5NjU1YWWE4NjNlZTY1MmRhYzkyZGVhNzcyZjdlMjkzZWQ4ZjAwNA==",Nonce="ac1c911c4792492687f8
f6b2264a491e",Created="2018-05-26T00:35:30Z"
accept: application/json
content-type: application/x-www-form-urlencoded

from=1069*****0012&to=
%2B86155****5678&templateId=abcdefghijklmghijklmghijklmghijklmgh&templateParas=%5B
%22520520%22%5D&statusCallback=http%3A%2F%2F205%2E145%2E111%2E168%3A9330%2Freport
```

3.2.2 API Usage Description

API List

Sending SMSs	Receiving Status Reports
● SMS Sending API: sends SMSs of the same content to one or more users. ● Batch SMS Sending API: sends SMSs of different content to multiple users.	Status Report Receiving API: receives SMS sending status reports.

API Request Address

The API request address does not differentiate regions and provinces. The Message & SMS service on the Huawei Cloud international website uses the same address. The API request address consists of the **Application Access Address** and **URI**. The data sources are as follows:

Parameter	Source	Example
Application Access Address	Log in to the Message & SMS console, and choose European SMS > Application Management .	https://smsapi.eu-west-101.myhuaweicloud.eu:443

Parameter	Source	Example
URI	Obtain the URI from the API Type described in SMS Sending API or Batch SMS Sending API .	SMS sending: <code>/sms/batchSendSms/v1</code> Batch SMS sending: <code>/sms/batchSendDiffSms/v1</code>

Sample API request addresses are as follows:

- Sending SMSs
`https://smsapi.eu-west-101.myhuaweicloud.eu:443/sms/batchSendSms/v1`
- Sending SMSs in batches
`https://smsapi.eu-west-101.myhuaweicloud.eu:443/sms/batchSendDiffSms/v1`

Demos

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3.2.3 SMS Sending API

Function

This API is used for the Message & SMS platform to send SMSs to specified users as requested.

Instructions

- Prerequisites
 - You have created an SMS application and obtained **Application Key**, **Application Secret**, **Application Access Address**, and **Channel No.**
 - You have applied for an SMS template and obtained the template ID.
- Notes
 - When an SMS is sent to a group of recipients, if the numbers in the **to** parameter contain characters other than digits and plus signs (+), the SMS cannot be sent to any of the numbers. If the **to** parameter contains only numbers and plus signs (+) but some of the numbers are invalid, status codes will identify the numbers to which the SMS fails to be sent and other valid numbers will not be affected. Numbers must be separated by commas (,). Each number contains a maximum of 21 characters. A maximum of 500 numbers are supported. If there are more than 500 numbers, the SMS fails to be sent to any of the numbers.
 - A long SMS may be split into multiple short messages with a fixed length. For details about how an SMS is split, see [SMS Sending Rules](#).
 - When X-WSSE authentication is used, the difference between the time when a random number is generated and the local time when the request is sent cannot exceed 24 hours. Otherwise, the authentication will fail.
 - Parameters in the request body must be converted using `urlencode`.

- e. When AK/SK authentication is used, the difference between the time when a random number is generated and the local time when the request is sent cannot exceed 15 minutes. Otherwise, the authentication will fail.

Type

Table 3-50 API type

Method	POST
URI	/sms/batchSendSms/v1
Communications Protocol	HTTPS

Request Parameters

Table 3-51 Request header parameters

Parameter	Mandatory	Type	Default Value	Description
Content-Type	Yes	String	None	The fixed value is application/x-www-form-urlencoded .
Authorization	Yes	String	None	- If AK/SK authentication is used, the value is SDK-HMAC-SHA256 Access="Value of app_key", SignedHeaders="Headers used for signature (lowercase)", Signature="Value calculated using the signature algorithm". For details, see Adding the Signature to the Request Header. - If X-WSSE authentication is used, the value is WSSE realm="SDP", profile="UsernameToken", type="Appkey".

Parameter	Mandatory	Type	Default Value	Description
X-WSSE	No (mandatory for X-WSSE authentication)	String	None	The value is UsernameToken Username="Value of app_key", PasswordDigest="Value of PasswordDigest", Nonce="Random string", Created="Time when the random string is generated". • PasswordDigest: The value is generated based on Base64 (SHA256 (Nonce + Created + Password)). The string consisting of Nonce, Created, and Password is SHA256 encrypted and does not contain plus signs (+) or spaces. Password indicates the value of application secret. • Nonce: When a platform user sends a request, a 1–128 character string with letters and digits is generated, for example, 66C92B11FF8A425FB8D4CCFE0ED9ED1F. • Created: indicates the time when the random string is generated. Standard UTC is used, for example, 2018-02-12T15:30:20Z. The time formats vary by programming language. For details, see Table 3-52.
X-Sdk-Date	No (mandatory for AK/SK authentication)	String	None	Format: yyyyMMdd'T'HHmmss'Z'.
Host	No	String	None	Destination address of API calling for AK/SK authentication, for example, smsapi.cn-north-4.myhuaweicloud.com:443 .

Table 3-52 Time formats in different programming languages

Programmi ng Language	Time Format
Java	yyyy-MM-dd'T'HH:mm:ss'Z'
PHP	Y-m-d\TH:i:s\Z
Python	%Y-%m-%dT%H:%M:%SZ
C#	yyyy-MM-ddTHH:mm:ssZ
Node.js	toISOString().replace(/.[0-9]+\Z/, 'Z') Note: In Node.js, delete ms from the time format converted by using toISOString() .
Go	2006-01-02T15:04:05Z

Table 3-53 Request body parameters

Paramete r	Ma nda tory	Type	Def ault Val ue	Description
from	Yes	String(1-21)	Non e	Number from which an SMS is sent. For European SMSs, set this parameter to the channel number allocated when the SMS application is created, for example, isms100000001.
to	Yes	String(1-21999)	Non e	SMS recipient number. The standard format is +{Country code}{Area code}{Terminal number}. If an SMS is sent to European countries or regions, all recipient numbers must be in the standard format, for example, +2412000000 (a Gabon number). Separate multiple recipient numbers with commas (.). Each number contains a maximum of 21 characters, and a maximum of 500 numbers are supported.
templated	Yes	String(1-32)	Non e	Unique SMS template ID. Obtain the template ID when applying for an SMS template. templateId must be used together with the templateParas parameter.

Parameter	Mandatory	Type	Default Value	Description
templateParas	No	String[]	None	Optional when a non-variable template is used. List of SMS template variables, used to configure the variables specified in templateId. This parameter is in the JSONArray format. For details, see Template and Variable Specifications. The number and the length of variables must be consistent with those defined in the template specified by the templateId parameter. For example, if the template specified by templateId contains two variables with lengths of 5 and 6, the variable list must contain two corresponding variables with lengths not exceeding 5 and 6, respectively. If the template content is "You have \${NUM_5} parcels delivered to \${TXT_6}, this parameter can be set to '["3","Gate of People's Park"]'.
statusCallback	No	String(1-1024)	None	Callback address of the user for receiving the SMS status report, for example http://my.com/receiveSMSReport. • If this parameter is specified, the SMS status report is sent to the user using the Status Report Receiving API. • If this parameter is not specified, the Message & SMS platform does not push the SMS status report returned by the carrier SMS center to the user. The SMS status report is saved in the platform for 1 hour and is automatically deleted when it times out. • You are advised to set the callback address to the domain name.
extend	No	String(1-128)	None	Extended parameter returned in the status report. Spaces and braces {} are not allowed.

Response Parameters

Table 3-54 Parameters in a response

Parameter	Mandatory	Type	Default Value	Description
code	Yes	String(1-7)	None	Result code returned after the request is sent.
description	Yes	String(1-512)	None	Description of the result code.
result	No	SmsID[1-1000]	None	SMS ID list. When multiple recipient numbers are required, the platform returns an SMS ID for each recipient number. This parameter is not carried when a response exception occurs.

Table 3-55 Definition of SmsID

Parameter	Mandatory	Type	Default Value	Description
smsMsgId	Yes	String(1-50)	None	Unique SMS ID.
from	Yes	String(1-21)	None	Number from which an SMS is sent.
originTo	Yes	String(1-21)	None	Number to which an SMS is sent.

Parameter	Mandatory	Type	Default Value	Description
status	Yes	String(1-7)	None	SMS status code. The following describes some SMS status codes. For details about the handling suggestions, see API Error Codes. • 000000: Request succeeded. • E200015: Too many SMSs are waiting to be sent. • E200028: Failed to verify the template. • E200029: Failed to verify the template type. • E200030: The template is not activated. • E200031: Failed to verify the protocol. • E200033: The template type is incorrect. • E200041: The recipient numbers of the same SMS are duplicate.
createTime	Yes	String(1-20)	None	Time when the SMS resource was created, that is, the UTC time when the Message & SMS platform received an SMS request from a user. Format: yyyy-MM-dd'T'HH:mm:ss'Z'

Result Codes

Table 3-56 Result codes in responses

Response Code	Result Code	Message	Description	Solution
200	000000	Success.	The request is sent successfully.	No action is required.

Response Code	Result Code	Message	Description	Solution
400	E000000	System error.	The system is abnormal.	Check whether the templateParas parameter is set correctly according to the code example. If the problem persists, contact the administrator.
	E000001	Authorization not contained in the HTTP header.	Authorization is not contained in the HTTP header.	Check whether the HTTP message header contains the Authorization field.
	E000002	realm not contained in Authorization.	realm is not contained in Authorization .	Check whether the Authorization field contains the realm attribute.
	E000003	profile not contained in Authorization.	profile is not contained in Authorization .	Check whether the Authorization field contains the profile attribute.
	E000004	The value of realm in Authorization must be SDP.	The value of realm in Authorization must be SDP .	Check whether the value of realm in the Authorization field is SDP .
	E000005	The value of profile in Authorization must be UsernameToken.	The value of profile in Authorization must be UsernameToken .	Check whether the value of profile in the Authorization field is UsernameToken .
	E000006	The value of type in Authorization must be app_key.	The value of type in Authorization must be Appkey .	Check whether the value of type in the Authorization field is Appkey .
	E000007	type not contained in Authorization.	type is not contained in Authorization .	Check whether the Authorization field contains the type attribute.
	E000008	WSSE not contained in Authorization.	WSSE is not contained in Authorization .	Check whether the Authorization field contains the WSSE field.

Response Code	Result Code	Message	Description	Solution
	E000 020	X-WSSE not contained in the HTTP header.	X-WSSE is not contained in the HTTP header.	Check whether the HTTP message header contains the X-WSSE field.
	E000 021	UserName not contained in X-WSSE.	UserName is not contained in X-WSSE .	Check whether the X-WSSE field contains the UserName attribute.
	E000 022	Nonce not contained in X-WSSE.	Nonce is not contained in X-WSSE .	Check whether the X-WSSE field contains the Nonce attribute.
	E000 023	Created not contained in X-WSSE.	Created is not contained in X-WSSE .	Check whether the X-WSSE field contains the Created attribute.
	E000 024	PasswordDigest not contained in X-WSSE.	PasswordDigest is not contained in X-WSSE .	Check whether the X-WSSE field contains the PasswordDigest attribute.
	E000 025	The format of Created is incorrect.	The format of Created is incorrect.	Check whether the format of the Created attribute in the X-WSSE field is correct.
	E000 026	UsernameToken not contained in X-WSSE.	UsernameToken is not contained in X-WSSE .	Check whether the X-WSSE field contains the UsernameToken attribute.
	E000 027	Invalid request.	The request is invalid.	Check whether the parameters in the request are valid based on the parameter description and requirements in the API reference.
	E000 040	The value of ContentType must be application/x-www-form-urlencoded.	The value of ContentType must be application/x-www-form-urlencoded .	Check whether the value of the ContentType header field is application/x-www-form-urlencoded .
	E000 503	The parameter format is incorrect.	The parameter format is incorrect.	Check whether the parameter format is correct.

Response Code	Result Code	Message	Description	Solution
	E000 510	The SMS fails to be sent. For details, see status.	Failed to send the SMS. For details, see the description of the status parameter.	Check the value of status in the response parameter to determine the cause of the failure, modify the parameter value, and resend the SMS.
	E000 623	Number of SMSs sent by the SP reached the limit.	Number of SMSs sent by the SP reached the limit.	Contact the operation manager to increase the maximum number of SMSs sent by the SP.
401	E000 101	Authentication failed.	Authentication failed.	Check whether the values of Authorization and X-WSSE are correct.
	E000 102	Invalid app_key.	app_key is invalid.	Check whether app_key in the request is correct. If app_key is correct, check whether the application access address (obtained from the Application Management page on the console) is correct.
	E000 103	The status of the app_key is unavailable.	app_key is unavailable.	Contact the administrator to check whether the app_key status is normal.
	E000 104	Invalid app_secret.	app_secret is invalid.	Check whether app_secret in the request is correct.
	E000 105	Invalid digest.	PasswordDigest is invalid.	Check whether PasswordDigest in the request is correct.
	E000 106	The app_key is not allowed to invoke this API.	The app_key does not have the permission to call this API.	Contact the administrator to check whether the application corresponding to the app_key supports SMS capability exposure.
	E000 109	The user status is deactivated.	The user is deactivated.	Contact the administrator to activate the user.

Response Code	Result Code	Message	Description	Solution
	E000110	Time out limit.	The time exceeds the limit.	When X-WSSE authentication is used, make sure that there is not too much difference between the time when the random string is generated and the local time when the request is sent. For details, contact the administrator.
	E000111	Incorrect username or password.	The username or password is incorrect.	The user information corresponding to app_key cannot be found. Contact the administrator.
	E000112	The subscriber status is frozen.	The user is frozen.	If the account is frozen due to arrears, top up the account by referring to Topping Up an Account (Prepaid Direct Customers). Then, the account is automatically unfrozen. If the account is frozen due to violation, modify the service and contact the operation manager to apply for account unfreezing.
403	E000620	The app client ip is not in ip white list.	The peer application IP address is not in the whitelist.	- It takes about 10 to 15 minutes for the IP address whitelist configuration to take effect. This error may be reported if the configuration does not take effect in time. - The IP address whitelist configuration is incorrect. On the console, choose Application Management, click Modify, and check and modify the configured IP address whitelist, or add a correct IP address whitelist (when it is configured by the platform administrator).

API Example

- Request example 1 (X-WSSE authentication)

```
POST /sms/batchSendSms/v1 HTTP/1.1
x-real-ip: 10.10.10.168
x-real-port: 10443
host: ompap.inner
content-length: 184
date: Fri, 13 Apr 2018 06:31:39 GMT
authorization: WSSE realm="SDP",profile="UsernameToken",type="Appkey"
x-ssse: UsernameToken
Username="ZRBz4bAXoFgEH7o4Ew308eXc1RA",PasswordDigest="NDA1MWIwNjI2ZTkYNWFlM2FhMTk5NDU1YTksNjU1YWVlNDQ1NTY1MmRhYzkxZWViNzczZjdjMjkxZWQ4ZjAwNA==",Nonce="ac1c911c4792492687f8f6b2264a491e",Created="2018-05-26T00:35:30Z"
accept: application/json
content-type: application/x-www-form-urlencoded

from=1069031221280012&to=
%2B8615512345678&templateId=abcdefghijklmghijklmnopqrstuvwxy&templateParas=%5B
%22520520%22%5D&statusCallback=http%3A%2F
%2F205%2E145%2E111%2E168%3A9330%2Freport
```

- Request example 2 (AK/SK authentication)

```
POST /sms/batchSendSms/v1 HTTP/1.1
Host: smsapi.cn-north-4.myhuaweicloud.com:443
content-length: 184
X-Sdk-Date: 20230519T005038Z
Authorization: SDK-HMAC-SHA256 Access=uxOF5yvM0H3C0t5G0xc272g7hA2l,
SignedHeaders=content-type;host;x-sdk-date,
Signature=082f05bcd561e291a7469939980c022f721a581967cc30eb3725c7aea4bd634d
Content-Type: application/x-www-form-urlencoded

from=1069*****0012&to=
%2B86155*****5678&templateId=abcdefghijklmghijklmghijklmghijklmgh&templateParas=%5B
%22520520%22%5D&statusCallback=http%3A%2F
%2F205%2E145%2E111%2E168%3A9330%2Freport
```

- Response example

```
HTTP/1.1 200 OK
Date: Fri, 13 Apr 2018 06:29:08 GMT
Server: WebServer
Content-Type: application/json;charset=UTF-8
Content-Length: 220

{"result":
[{"originTo":":"+8615512345678","createTime":"2018-05-25T16:34:34Z","from":"1069031221280012","s
msMsgId":"d6e3cdd0-522b-4692-8304-
a07553cdf591_8539659","status":"000000"}], "code":"000000","description":"Success"}
```

Demos

Download the following demos to quickly develop applications.

3.2.4 Batch SMS Sending API

Function

This API is used for the Message & SMS platform to send different SMSs to different users as requested.

Instructions

- Prerequisites
 - a. You have created an SMS application and obtained **Application Key**, **Application Secret**, **Application Access Address**, and **Channel No.**.

- b. You have applied for an SMS template and obtained the template ID.
- Notes
 - a. An SMS can be sent to a maximum of 500 numbers separated by commas (,). Each number contains a maximum of 21 characters. If there are more than 500 numbers, the SMS fails to be sent to any of the numbers.
 - b. When X-WSSE authentication is used, the difference between the time when a random number is generated and the local time when the request is sent cannot exceed 24 hours. Otherwise, the authentication will fail.
 - c. When AK/SK authentication is used, the difference between the time when a random number is generated and the local time when the request is sent cannot exceed 15 minutes. Otherwise, the authentication will fail.

Type

Table 3-57 API type

Method	POST
URI	/sms/batchSendDiffSms/v1
Communications Protocol	HTTPS

Request Parameters

Table 3-58 Request header parameters

Parameter	Mandatory	Type	Default Value	Description
Content-Type	Yes	String	None	The fixed value is application/json .

Parameter	Mandatory	Type	Default Value	Description
Authorization	Yes	String	None	- If AK/SK authentication is used, the value is SDK-HMAC-SHA256 Access="Value of app_key", SignedHeaders="Headers used for signature (lowercase)", Signature="Value calculated using the signature algorithm". For details, see Adding the Signature to the Request Header. - If X-WSSE authentication is used, the value is WSSE realm="SDP", profile="UsernameToken", type="Appkey".
X-WSSE	No (mandatory for X-WSSE authentication)	String	None	The value is UsernameToken Username="Value of app_key", PasswordDigest="Value of PasswordDigest", Nonce="Random string", Created="Time when the random string is generated". PasswordDigest: The value is generated based on Base64 (SHA256 (Nonce + Created + Password)). The string consisting of Nonce, Created, and Password is SHA256 encrypted and does not contain plus signs (+) or spaces. Password indicates the value of application secret. Nonce: When a platform user sends a request, a 1–128 character string with letters and digits is generated, for example, 66C92B11FF8A425FB8D4CCFE0ED9ED1F. Created: indicates the time when the random string is generated. Standard UTC is used, for example, 2018-02-12T15:30:20Z. The time formats vary by programming language. For details, see Table 3-59.

Parameter	Mandatory	Type	Default Value	Description
X-Sdk-Date	No (mandatory for AK/SK authentication)	String	None	Format: yyyyMMdd'T'HHmmss'Z'.
Host	No	String	None	Destination address of API calling for AK/SK authentication, for example, smsapi.cn-north-4.myhuaweicloud.com:443 .

Table 3-59 Time formats in different programming languages

Programming Language	Time Format
Java	yyyy-MM-dd'T'HH:mm:ss'Z'
PHP	Y-m-d\TH:i:s\Z
Python	%Y-%m-%dT%H:%M:%SZ
C#	yyyy-MM-ddTHH:mm:ssZ
Node.js	toISOString().replace(/.[0-9]+\Z/, 'Z') Note: In Node.js, delete ms from the time format converted by using toISOString() .
Go	2006-01-02T15:04:05Z

Table 3-60 Request body parameters

Parameter	Mandatory	Type	Default Value	Description
from	Yes	String(1-21)	None	Number from which an SMS is sent. For European SMSs, set this parameter to the channel number allocated when the SMS application is created, for example, isms100000001.
statusCallback	No	String(1-1024)	None	Callback address of the user for receiving the SMS status report, for example http://my.com/receiveSMSReport . - If this parameter is specified, the SMS status report is sent to the user using the Status Report Receiving API. - If this parameter is not specified, the Message & SMS platform does not push the SMS status report returned by the carrier SMS center to the user. The SMS status report is saved in the platform for 1 hour and is automatically deleted when it times out. - You are advised to set the callback address to the domain name.
smsContent	Yes	SmsContent[]	None	Content of an SMS notification. Its size cannot exceed 64 KB.
extend	No	String(1-128)	None	Extended parameter returned in the status report. Spaces and braces {} are not allowed.

Table 3-61 Definition of SmsContent

Parameter	Mandatory	Type	Default Value	Description
to	Yes	String[] (1-21999)	None	SMS recipient numbers for group sending. The standard format is +{Country code}{Area code}{Terminal number}. If an SMS is sent to European countries or regions, all recipient numbers must be in the standard format, for example, +2412000000 (a Gabon number). Separate multiple recipient numbers with commas (.). Each number contains a maximum of 21 characters, and a maximum of 500 numbers are supported.
templateId	Yes	String(1-32)	None	Unique SMS template ID. Obtain the template ID when applying for an SMS template. templateId must be used together with the templateParas parameter.
templateParas	No	String[]	None	Optional when a non-variable template is used. List of SMS template variables, used to configure the variables specified in templateId. This parameter is in the JSONArray format. For details, see Template and Variable Specifications. The number and the length of variables must be consistent with those defined in the template specified by the templateId parameter. For example, if the template specified by templateId contains two variables with lengths of 5 and 6, the variable list must contain two corresponding variables with lengths not exceeding 5 and 6, respectively. If the template content is "You have \$ {NUM_5} parcels delivered to \${TXT_6}, this parameter can be set to ['3','Gate of People's Park']".

Response Parameters

Table 3-62 Parameters in a response

Parameter	Mandatory	Type	Default Value	Description
code	Yes	String(1-7)	None	Result code returned after the request is sent.
description	Yes	String(1-512)	None	Description of the result code.
result	No	SmsID[]	None	SMS body. A response does not contain this parameter when an error occurs.

Table 3-63 Definition of SmsID

Parameter	Mandatory	Type	Default Value	Description
smsMsgId	Yes	String(1-50)	None	Unique SMS ID.
from	Yes	String(1-21)	None	Number from which an SMS is sent.
originTo	Yes	String(1-21)	None	Number to which an SMS is sent.

Parameter	Mandatory	Type	Default Value	Description
status	Yes	String(1-7)	None	SMS status code. The following describes some SMS status codes. For details about the handling suggestions, see API Error Codes. • 000000: Request succeeded. • E200015: Too many SMSs are waiting to be sent. • E200028: Failed to verify the template. • E200029: Failed to verify the template type. • E200030: The template is not activated. • E200031: Failed to verify the protocol. • E200033: The template type is incorrect. • E200041: The recipient numbers of the same SMS are duplicate.
createTime	Yes	String(1-20)	None	Time when the SMS resource was created, that is, the UTC time when the Message & SMS platform received an SMS request from a user. Format: yyyy-MM-dd'T'HH:mm:ss'Z'

Result Codes

Table 3-64 Result codes in responses

Response Code	Result Code	Message	Solution
200	000000	Success.	No action is required.
400	E000000	System error.	Check whether the templateParas parameter is set correctly according to the code example. If the problem persists, contact the administrator.
	E000001	Authorization not contained in the HTTP header.	Check whether the HTTP message header contains the Authorization field.

Response Code	Result Code	Message	Solution
	E000002	realm not contained in Authorization.	Check whether the Authorization field contains the realm attribute.
	E000003	profile not contained in Authorization.	Check whether the Authorization field contains the profile attribute.
	E000004	The value of realm in Authorization must be SDP.	Check whether the value of realm in the Authorization field is SDP .
	E000005	The value of profile in Authorization must be UsernameToken.	Check whether the value of profile in the Authorization field is UsernameToken .
	E000006	The value of type in Authorization must be app_key.	Check whether the value of type in the Authorization field is Appkey .
	E000007	type not contained in Authorization.	Check whether the Authorization field contains the type attribute.
	E000008	WSSE not contained in Authorization.	Check whether the Authorization field contains the WSSE field.
	E000020	X-WSSE not contained in the HTTP header.	Check whether the HTTP message header contains the X-WSSE field.
	E000021	UserName not contained in X-WSSE.	Check whether the X-WSSE field contains the UserName attribute.
	E000022	Nonce not contained in X-WSSE.	Check whether the X-WSSE field contains the Nonce attribute.
	E000023	Created not contained in X-WSSE.	Check whether the X-WSSE field contains the Created attribute.
	E000024	PasswordDigest not contained in X-WSSE.	Check whether the X-WSSE field contains the PasswordDigest attribute.
	E000025	The format of Created is incorrect.	Check whether the format of the Created attribute in the X-WSSE field is correct.

Response Code	Result Code	Message	Solution
	E000026	UsernameToken not contained in X-WSSE.	Check whether the X-WSSE field contains the UsernameToken attribute.
	E000027	Invalid request.	Check whether the parameters in the request are valid based on the parameter description and requirements in the API reference.
	E000503	The parameter format is incorrect.	Check whether the parameter format is correct.
	E000510	The SMS fails to be sent. For details, see status.	Check the value of status in the response parameter to determine the cause of the failure, modify the parameter value, and resend the SMS.
	E000623	Number of SMSs sent by the SP reached the limit.	Contact the operation manager to increase the maximum number of SMSs sent by the SP.
401	E000101	Authentication failed.	Check whether the values of Authorization and X-WSSE are correct.
	E000102	Invalid app_key.	Check whether app_key in the request is correct. If app_key is correct, check whether the application access address (obtained from the Application Management page on the console) is correct.
	E000103	The status of the app_key is unavailable.	Contact the administrator to check whether the app_key status is normal.
	E000104	Invalid app_secret.	Check whether app_secret in the request is correct.
	E000105	Invalid digest.	Check whether PasswordDigest in the request is correct.
	E000106	The app_key is not allowed to invoke this API.	Contact the administrator to check whether the application corresponding to the app_key supports SMS capability exposure.
	E000109	The user status is deactivated.	Contact the administrator to activate the user.

Response Code	Result Code	Message	Solution
	E000110	Time out limit.	When X-WSSE authentication is used, make sure that there is not too much difference between the time when the random string is generated and the local time when the request is sent. For details, contact the administrator.
	E000111	Incorrect username or password.	The user information corresponding to app_key cannot be found. Contact the administrator.
	E000112	The subscriber status is frozen.	If the account is frozen due to arrears, top up the account by referring to Topping Up an Account (Prepaid Direct Customers). Then, the account is automatically unfrozen. If the account is frozen due to violation, modify the service and contact the operation manager to apply for account unfreezing.
403	E000620	The app client ip is not in ip white list.	- It takes about 10 to 15 minutes for the IP address whitelist configuration to take effect. This error may be reported if the configuration does not take effect in time. - The IP address whitelist configuration is incorrect. On the console, choose Application Management, click Modify, and check and modify the configured IP address whitelist, or add a correct IP address whitelist (when it is configured by the platform administrator).

API Example

- **Example request 1**
POST /sms/batchSendDiffSms/v1 HTTP/1.1
x-real-ip: 10.10.10.168
x-real-port: 10443
host: ompap.inner
content-length: 315
date: Fri, 13 Apr 2018 06:48:35 GMT
authorization: WSSE realm="SDP",profile="UsernameToken",type="Appkey"
x-wsse: UsernameToken
Username="ZRBZr4bAXoFgEH7o4Ew308eXc1RA",PasswordDigest="NDA1MWIwNjl2ZTZkyNWFlM2FhMTE5NDDE1YTk5NjU1YWE4NjNlZTY1MmRhYzZkZGVhNzczZjZjMjkzZWQ0ZjZAwNA==",Nonce="ac1c911c4792492687f8f6b2264a491e",Created="2018-05-26T00:35:30Z"
accept: application/json

```
content-type: application/json
```

```
{
  "from": "1069031221280012",
  "smsContent": {
    "to": [
      "+8615512345678",
      "+8615512345679"
    ],
    "templateId": "abcdefghabcdefghabcdefgh",
    "templateParas": [
      "062569"
    ],
    "to": [
      "+8615512345680"
    ],
    "templateId": "hgfedcbahgfedcbahgfedcbahgfedcba",
    "templateParas": [
      "605623"
    ]
  },
  "statusCallback": "http://205.145.111.168:9330/report"
}
```

- **Example request 2**

POST /sms/batchSendDiffSms/v1 HTTP/1.1

Host: smsapi.cn-north-4.myhuaweicloud.com:443

X-Sdk-Date: 20230519T005038Z

Authorization: SDK-HMAC-SHA256 Access=uxOF5yvM0H3C0t5G0xc272g7hA2l,

SignedHeaders=content-type;host;x-sdk-date,

Signature=082f05bcd561e291a7469939980c022f721a581967cc30eb3725c7aea4bd634d

content-length: 315

Content-Type: application/json

```
{
  "from": "1069*****0012",
  "smsContent": {
    "to": [
      "+86155****5678",
      "+86155****5679"
    ],
    "templateId": "abcdefghabcdefghabcdefgh",
    "templateParas": [
      "062569"
    ],
    "to": [
      "+86155****45680"
    ],
    "templateId": "hgfedcbahgfedcbahgfedcbahgfedcba",
    "templateParas": [
      "605623"
    ]
  },
  "statusCallback": "http://205.145.111.168:9330/report"
}
```

- **Response Example**

HTTP/1.1 200 OK

Date: Fri, 13 Apr 2018 06:46:04 GMT

Server: WebServer

Content-Type: application/json; charset=UTF-8

Content-Length: 541

```
{
  "result": [
    {
      "originTo": "+8615512345678",
      "createTime": "2018-05-25T16:34:34Z",
      "from": "1069031221280012",
      "smsMsgId": "5963c5be-f189-4c0c-ab2e-7cab0c42c798_52",
      "status": "000000"
    },
    {
      "originTo": "+8615512345679",
      "createTime": "2018-05-25T16:34:34Z",
      "from": "1069031221280012",
      "smsMsgId": "5963c5be-f189-4c0c-ab2e-7cab0c42c798_53",
      "status": "000000"
    },
    {
      "originTo": "+8615512345680",
      "createTime": "2018-05-25T16:34:34Z",
      "from": "1069031221280012",
      "smsMsgId": "5963c5be-f189-4c0c-ab2e-7cab0c42c798_54",
      "status": "000000"
    }
  ],
  "code": "000000",
  "description": "Success"
}
```

Demos

Download the following demos to quickly develop applications.

3.2.5 Status Report Receiving API

Function

This API is used to receive SMS status reports from the Message & SMS platform. You can set the SMS status report callback address by specifying the **statusCallback** field in the SMS Sending API and Batch SMS Sending API.

NOTE

- If the **statusCallback** field is set, the system uses its value as the SMS status report callback address.
- If the **statusCallback** field is not set, a user cannot receive status reports sent by the Message & SMS platform.

Instructions

- **Prerequisites**

The status report pushed by the platform is not authenticated.

- **Notes**
After the platform successfully sends an SMS, it sends status reports to the user within 72 hours.

Type

Table 3-65 API type

Method	POST
URI	Callback address specified in the SMS Sending API and Batch SMS Sending API
Communications Protocol	HTTPS

NOTE

When the callback API uses the HTTPS protocol, the server must support TLS 1.2, and one or more of the following cipher suites must be supported:

TLS_ECDHE_ECDSA_WITH_AES_128_GCM_SHA256,
TLS_ECDHE_ECDSA_WITH_AES_256_GCM_SHA384,
TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256, and
TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384.

Request Parameters

Table 3-66 Request header parameter

Parameter	Mandatory	Type	Default Value	Description
Content-Type	Yes	String	None	The fixed value is application/x-www-form-urlencoded .

Table 3-67 Parameters in the request body

Parameter	Mandatory	Type	Default Value	Description
smsMsgId	Yes	String(1-50)	None	Unique SMS identifier returned after an SMS is successfully sent.
total	No	String(1-2)	None	Number of SMSs that are split from a long SMS. If the SMS is not split, set this parameter to 1 .
sequence	No	String(1-2)	None	Sequence number after a long SMS is split. This parameter is valid only when the value of total is greater than 1 . If the SMS is not split, set this parameter to 1 .
status	Yes	String(1-7)	None	Enumerated values of an SMS status report. For details about the values, see Table 3-68 . For details about how to rectify the faults, see SMS Status Error Codes.
source	No	String (enumeration)	None	Source of the SMS status report. 1: The status report is generated by the Message & SMS platform. 2: The status report is returned by the SMSC. 3: status report generated by the Huawei platform.
updateTime	No	String(1-20)	None	SMS resource update time, which is generally the time when the Message & SMS platform receives the SMS status report. The value is in the format of yyyy-MM-dd'T'HH:mm:ss'Z'. The time is converted to %3a using urlencode. When the Message & SMS platform does not receive the SMS status report from the SMSC, the platform constructs a status report that does not contain the updateTime parameter.
orgCode	No	String(1-7)	None	Status codes of southbound NEs are transparently transmitted. This parameter is contained only in European SMS status reports. When the status code is not returned, the parameter is not used.

Parameter	Mandatory	Type	Default Value	Description
extend	No	String(1-128)	None	Extended field in the request sent by a user. If the SMS sent by a user does not carry the extend parameter, the status report does not contain the extend parameter.
to	No	String(1-21)	None	Recipient number of the SMS corresponding to the status report. This parameter is carried only when the status report contains the extend parameter.

Table 3-68 Values of status

Value	Description
DELIVRD	The user has received the SMS.
EXPIRED	The SMS times out.
DELETED	The SMS has been deleted.
UNDELIV	The SMS fails to be delivered.
ACCEPTD	The SMS has been received.
UNKNOWN	The SMS status is unknown.
REJECTD	The SMS has been rejected.
E200027	Failed to match the SMSGW.
E200032	An SMS template is required.
E200034	The SMS retransmission times out.
E200035	Failed to replace the SMS protocol field.
E200036	The southbound rate control configuration is 0.
E200038	Long SMS receiving times out.
MILIMIT	Reached the maximum number of SMSs sent to a recipient number per minute.
LIMIT	Reached the maximum number of SMSs sent to a recipient number.
BEYONDN	
KEYWORD	The SMS keyword was intercepted.
BLACK	The number is blocked.

Value	Description
MBBLACK	
DJ:0255	The carrier intercepted the SMS because the content is not allowed.
1	The phone number is suspended or does not exist, or the phone is powered off.
24	
MK:xxxx	
MN:xxxx	
LT:0001	
MA:xxxx	The SMSC does not return a response.
MB:xxxx	The SMSC returns an error response.
MC:xxxx	No status report is received from the SMSC.
CA:xxxx	The SCP does not return a response.
CB:xxxx	The SCP returns an error response.
DA:xxxx	The DSMP does not return a response.
DB:xxxx	The DSMP returns an error response.
SA:xxxx	The SP does not return a response.
SB:xxxx	The SP returns an error response.
IA:xxxx	The ISMG does not return a response.
IB:xxxx	The ISMG returns an error response.
IC:xxxx	No status report is received from the ISMG.
SC:0001	The SMS is intercepted due to manual review.
SC:0002	The SMS is intercepted due to the manual review alarm.
SC:0003	The SMS is intercepted due to the blacklist.
SC:0004	The SMS is intercepted due to the redlist.
SC:0005	The SMS is intercepted due to the complaint blacklist.
SC:0006	The SMS is intercepted due to forbidden keywords.
SC:0007	The SMS is intercepted due to feature keywords.
SC:0008	The SMS is intercepted due to control keywords.
SC:0009	The SMS is intercepted due to lack of mandatory keywords.

Value	Description
SC:0010	The SMS is intercepted due to the very frequent SMS function.
SC:0011	The SMS is intercepted due to period control.
SC:0012	Manual review times out.
SC:0013	The SMS is intercepted due to the signature blacklist.
SC:0014	The SMS matches with the approval-free template.
SC:0015	The SMS matches with the interception template.
SC:0016	The SMS is intercepted due to the unsubscription blacklist.
SC:0017	The SMS is intercepted due to the non-registration template.
SC:0018	The SMS is intercepted due to the non-registration signature.

Response Parameters

A user can send any response to the Message & SMS platform, where the response is not processed.

API Example

- Request example**
 POST /report HTTP/1.1
 Host: 205.145.111.168:9330
 Content-Type: application/x-www-form-urlencoded
 Connection: close
 Pooltype: approxy
 Ompsid: 7f540777fe4b40dfb3c21d10f48781e3
 TerminalIP: 205.141.112.18
 TrcModule: AP
 UserTrace: application
 TraceHandle: DMZ_818405

 sequence=1&total=1&orgCode=000&updateTime=2018-04-13T06%3A31%3A46Z&source=2&smsMsgId=b9d9b4fe-ad0e-4a2a-a2c7-445505b674ac_6&status=DELIVRD
- Response example**
 HTTP/1.1 200 OK
 Date: Fri, 13 Apr 2018 06:31:45 GMT
 Content-Type: application/JSON; charset=UTF-8
 Content-Length: 43

 {"returnCode":0,"returnCodeDesc":"Success"}

Demos

Download the following demos to quickly develop applications.

4 Permission Policies and Supported Actions

This chapter describes fine-grained permissions management for your Message & SMS. If your account does not need individual IAM users, then you may skip over this chapter.

A policy is a set of permissions defined in JSON format. By default, new IAM users do not have any permissions assigned. To assign permissions to these new users, add them to one or more groups, and attach permissions policies to these groups.

You can grant users permissions by using **roles** and **policies**. Roles are a type of coarse-grained authorization mechanism that defines permissions related to user responsibilities. Policies define API-based permissions for operations on specific resources under certain conditions, allowing for more fine-grained, secure access control of cloud resources.

NOTE

Use policy-based authorization 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.

Supported Actions

There are system-defined policies that can be directly used. You can also create custom policies and use them to supplement system-defined policies for more refined access control. Operations supported by policies are specific to APIs. The following are basic concepts related to policies:

- **Permissions:** Allow or deny certain operations.
- **APIs:** APIs that can be called in a custom policy.
- **Actions:** Specific operations that are allowed or denied in a custom policy.
- **Dependent actions:** When assigning an action to users, you also need to assign dependent permissions for that action to take effect.
- **IAM projects/Enterprise projects:** Authorization scope of a custom policy. A custom policy can be applied to IAM projects or enterprise projects or both.

For example, if you set the authorization scope of a custom policy to both IAM projects and enterprise projects, the policy takes effect for user groups in either IAM or enterprise projects. If an action supports only IAM projects, the custom policy that contains this action will take effect only for user groups in 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 "×" indicates that the action does not support the project. For details about the differences between IAM and enterprise projects, see [Differences Between IAM and Enterprise Management](#).

Table 4-1 describes the actions that can be defined in custom policies of Message & SMS.

Table 4-1 Message & SMS actions

Permissi on	Action	API	Dependent Action	IA M Pro jec t	Ent erp ris e Pro jec t
Delete an SMS template	msgsms:templates:delete	DELETE /v2/{project_id}/msgsms/templates/{id}	1. msgsms:service:getServiceStatus 2. msgsms:templates:getMsgtemplate	√	×
Delete a contact	msgsms:contacts:delete	This operation can be performed only on the console. The API is not supported.	1. msgsms:service:getServiceStatus 2. msgsms:contacts:get	√	×
Query the number of SMS applications	msgsms:applications:getCount	GET /v2/{project_id}/msgsms/apps-count	msgsms:service:getServiceStatus	√	×
Query an SMS application	msgsms:applications:getApp	- GET /v2/{project_id}/msgsms/apps - GET /v2/{project_id}/msgsms/apps/{id}	msgsms:service:getServiceStatus	√	×

Permissi on	Action	API	Dependent Action	IA M Pro jec t	Ent erp ris e Pro jec t
Query permissions	msgsms:applications:getAuthority	This operation can be performed only on the console. The API is not supported.	msgsms:service:getServiceStatus	√	×
Query an SMS application secret	msgsms:applications:getAppSecret	This operation can be performed only on the console. The API is not supported.	msgsms:service:getServiceStatus	√	×
Query the reason for tenant restrictions	msgsms:applications:getTenant	This operation can be performed only on the console. The API is not supported.	msgsms:service:getServiceStatus	√	×
Query SMS types	msgsms:signatures:getType	This operation can be performed only on the console. The API is not supported.	msgsms:service:getServiceStatus	√	×
Query an SMS template	msgsms:templates:getMsgTemplate	- GET /v2/{project_id}/msgsms/templates - GET /v2/{project_id}/msgsms/templates/{id}	msgsms:service:getServiceStatus	√	×
Query and verify the tenant order status	msgsms:service:getServiceStatus	This operation can be performed only on the console. The API is not supported.	-	√	×

Permissi on	Action	API	Dependent Action	IA M Pro jec t	Ent erp ris e Pro jec t
Query developer information	msgsms:template:getDeveloper	This operation can be performed only on the console. The API is not supported.	msgsms:service:getServiceStatus	√	×
Query SMS template names	msgsms:template:getMessageTemplateName	This operation can be performed only on the console. The API is not supported.	msgsms:service:getServiceStatus	√	×
Query SMS template variables	msgsms:template:getMessageTemplateVariable	GET /v2/{project_id}/msgsms/templates/{id}/variable	msgsms:service:getServiceStatus	√	×
Query the name of a Group SMS Assistant task	msgsms:msgBatchTasks:getMsgBatchTaskName	This operation can be performed only on the console. The API is not supported.	msgsms:service:getServiceStatus	√	×
Query Group SMS Assistant tasks	msgsms:msgBatchTasks:getMsgBatchTask	This operation can be performed only on the console. The API is not supported.	msgsms:service:getServiceStatus	√	×
Query details of a Group SMS Assistant task result	msgsms:msgBatchTasks:getRecord	This operation can be performed only on the console. The API is not supported.	msgsms:service:getServiceStatus	√	×

Permissi on	Action	API	Dependent Action	IA M Pro jec t	Ent erp ris e Pro jec t
Export recipient numbers of a Group SMS Assistant task	msgsms:msgBatchTasks:download	This operation can be performed only on the console. The API is not supported.	1. msgsms:service:getServiceStatus 2. msgsms:msgBatchTasks:getMsgbatchtaskName 3. msgsms:msgBatchTasks:getMsgbatchtask 4. msgsms:msgBatchTasks:getRecord	√	×
Query SMS threshold policies	msgsms:limits:get	This operation can be performed only on the console. The API is not supported.	msgsms:service:getServiceStatus	√	×
Query SMS statistics	msgsms:statistics:getStatistics	GET /v2/{project_id}/msgsms/metric/stat	msgsms:service:getServiceStatus	√	×
Export SMS statistics	msgsms:statistics:exportStatistics	This operation can be performed only on the console. The API is not supported.	1. msgsms:service:getServiceStatus 2. msgsms:statistics:getStatistics	√	×
Query a contact	msgsms:contacts:get	This operation can be performed only on the console. The API is not supported.	msgsms:service:getServiceStatus	√	×

Permissi on	Action	API	Dependent Action	IA M Pro jec t	Ent erp ris e Pro jec t
Query historical request information	msgsms:blacklists:getBlacklist	This operation can be performed only on the console. The API is not supported.	msgsms:service:getServiceStatus	√	×
Query SMS overview statistics	msgsms:statistics:getOverviewStatistics	This operation can be performed only on the console. The API is not supported.	msgsms:service:getServiceStatus	√	×
Query message alert	msgsms:notifications:get	This operation can be performed only on the console. The API is not supported.	msgsms:service:getServiceStatus	√	×
Query the price of a single SMS	msgsms:price:getUnitPrice	This operation can be performed only on the console. The API is not supported.	msgsms:service:getServiceStatus	√	×
Query public settings	msgsms:signatures:getConfig	This operation can be performed only on the console. The API is not supported.	msgsms:service:getServiceStatus	√	×
Query the tenant enterprise name	msgsms:signatures:getTenantEnterpriseName	This operation can be performed only on the console. The API is not supported.	msgsms:service:getServiceStatus	√	×
Query SMS sending country	msgsms:templates:getCountry	GET /v2/{project_id}/msgsms/country	msgsms:service:getServiceStatus	√	×

Permissi on	Action	API	Dependent Action	IA M Pro jec t	Ent erp ris e Pro jec t
Create an SMS applicati on	msgsms:applicati ons:create	POST /v2/ {project_id}/ msgsms/apps	1. msgsms:service:getServicestatus 2. msgsms:applications:getCount 3. msgsms:applications:getTenant 4. msgsms:applications:getAuth ority 5. msgsms:enterpriseProjects:get	√	×
Send a verificati on code	msgsms:verifycode :sendVerifycode	This operation can be performed only on the console. The API is not supported.	1. msgsms:service:getServicestatus 2. msgsms:applications:getCount 3. msgsms:applications:getApp	√	×
Create an SMS template	msgsms:template s:create	POST /v2/ {project_id}/ msgsms/ templates	1. msgsms:service:getServicestatus 2. msgsms:applications:getTenant 3. msgsms:applications:getApp 4. msgsms:signat ures:getType 5. msgsms:templ ates:getDevelo per 6. msgsms:templ ates:getMsgte mplateName	√	×

Permissi on	Action	API	Dependent Action	IA M Pro jec t	Ent erp ris e Pro jec t
Import a Group SMS Assistant task	msgsms:msgBatchTasks:upload	This operation can be performed only on the console. The API is not supported.	msgsms:service:getServiceStatus	√	×
Create a Group SMS Assistant task	msgsms:msgBatchTasks:create	This operation can be performed only on the console. The API is not supported.	1. msgsms:service:getServiceStatus 2. msgsms:applications:getApp 3. msgsms:signatures:getType 4. msgsms:msgBatchTasks:upload	√	×
Query SMS details	msgsms:details:get	GET /v2/{project_id}/msgsms/detail	msgsms:service:getServiceStatus	√	×
Add a contact	msgsms:contacts:create	This operation can be performed only on the console. The API is not supported.	msgsms:service:getServiceStatus	√	×
Update an SMS application secret	msgsms:applications:updateAppSecret	This operation can be performed only on the console. The API is not supported.	1. msgsms:service:getServiceStatus 2. msgsms:applications:getCount 3. msgsms:applications:getApp 4. msgsms:verifyCodes:sendVerifyCode 5. msgsms:applications:getAppSecret	√	×

Permissi on	Action	API	Dependent Action	IA M Pro jec t	Ent erp ris e Pro jec t
Modify an SMS applicati on	msgsms:applicati ons:updateApp	PUT /v2/ {project_id}/ msgsms/apps/ {id}	1. msgsms:service:getServicestatus 2. msgsms:applications:getCount 3. msgsms:applications:getApp 4. msgsms:enterpriseProjects:get	√	×
Activate a signature	msgsms:signatures:activate	PUT /v2/ {project_id}/ msgsms/ signatures/{id}/ active	1. msgsms:service:getServicestatus 2. msgsms:signatures:getSignature 3. msgsms:signatures:getType 4. msgsms:signatures:getSignatureName 5. msgsms:templates:getConfig	√	×

Permissi on	Action	API	Dependent Action	IA M Pro jec t	Ent erp ris e Pro jec t
Modify an SMS template	msgsms:templates:update	PUT /v2/{project_id}/msgsms/templates/{id}	1. msgsms:service:getServiceStatus 2. msgsms:templates:getMsgtemplate 3. msgsms:templates:getConfig 4. msgsms:signatures:getSignature 5. msgsms:applications:getTenant 6. msgsms:applications:getApp 7. msgsms:signatures:getType 8. msgsms:templates:getDeveloper 9. msgsms:templates:getMsgtemplateName	√	×
Update a scheduled Group SMS Assistant task	msgsms:msgBatchTasks:update	This operation can be performed only on the console. The API is not supported.	1. msgsms:service:getServiceStatus 2. msgsms:applications:getApp 3. msgsms:signatures:getType	√	×
Set SMS threshold policies	msgsms:limits:update	This operation can be performed only on the console. The API is not supported.	msgsms:service:getServiceStatus	√	×

Permissi on	Action	API	Dependent Action	IA M Pro jec t	Ent erp ris e Pro jec t
Modify contact information	msgsms:contacts:update	This operation can be performed only on the console. The API is not supported.	1. msgsms:service:getServiceStatus 2. msgsms:contacts:get	√	×
Batch import SMS templates	msgsms:template:import	This operation can be performed only on the console. The API is not supported.	msgsms:service:getServiceStatus	√	×
Query the effectiveness of the country whitelist	msgsms:countryWhitelist:getValidity	This operation can be performed only on the console. The API is not supported.	msgsms:service:getServiceStatus	√	×
Modify the effectiveness of the country whitelist	msgsms:countryWhitelist:updateValidity	This operation can be performed only on the console. The API is not supported.	1. msgsms:service:getServiceStatus 2. msgsms:countryWhitelist:getValidity	√	×
Query the country whitelist	msgsms:countryWhitelist:getWhitelist	This operation can be performed only on the console. The API is not supported.	msgsms:service:getServiceStatus	√	×
Add the country whitelist	msgsms:countryWhitelist:addWhitelist	This operation can be performed only on the console. The API is not supported.	msgsms:service:getServiceStatus	√	×

Permissi on	Action	API	Dependent Action	IA M Pro jec t	Ent erp ris e Pro jec t
Delete the country whitelist	msgsms:countryWhitelist:deleteWhitelist	This operation can be performed only on the console. The API is not supported.	1. msgsms:service:getServiceStatus 2. msgsms:countryWhitelist:getWhitelist	√	×
Query a business license file	msgsms:businessLicense:get	GET /v2/{project_id}/msgsms/upload-files	msgsms:service:getServiceStatus	√	×
Upload a business license file	msgsms:businessLicense:import	POST /v2/{project_id}/msgsms/upload-files	msgsms:service:getServiceStatus	√	×

5 Appendixes

5.1 Status Codes

Status Code	Description
200	OK
201	Created
401	Unauthorized
403	Forbidden
404	Not Found
500	System error

5.2 Error Codes

5.2.1 API Error Codes

NOTE

This section describes all error codes returned when calling APIs fails. You are advised to press **Ctrl+F** to search for error codes on the page and find the required handling suggestions.

Solution for 404 Error

If a 404 message is returned when an API is called, check whether the application access address and URI (for details, see [Development Preparation](#)) are correct and whether they are combined into a complete request URL, for example, `https://smsapi.ap-southeast-1.myhuaweicloud.com:443/sms/batchSendSms/v1`.

Error Codes and Handling Suggestions

API calling error codes are generated when the [SMS Sending API](#) or [Batch SMS Sending API](#) is called. An example response is as follows:

Note: One response contains only one error code, and one mobile number corresponds to one status.

```
HTTP/1.1 200 OK
Date: Mon, 06 Aug 2018 11:59:50 GMT
Server: WebServer
Content-Type: application/json;charset=UTF-8
Content-Length: 224

{
  "code": "000000",
  "description": "Success",
  "result": [
    {
      "originTo": "+8618612345678",
      "createTime": "2018-08-06T11:59:50Z",
      "from": "1069031221280000001",
      "smsMsgId": "4b4b34e7-1a9e-42ac-b309-d10997148905_85496076",
      "status": "000000"
    }
  ]
}
```

Troubleshooting Based on the code Parameter

Value	Description	Handling Suggestion
000000	A request was sent successfully.	API calling was successful. Wait for the SMS status report.
E000000	The system is abnormal. Typically, this means SMS platform cannot parse the request format because the format is incorrect.	- Check the SMS template and make sure that {} (curly braces) are used for variables, not regular parenthesis. Apply for a new template. - Check whether the quotation marks in the value of templateParas are properly used. Refer to the code examples for reference. - When calling the SMS Sending API, set templateParas to a character string. The value of templateParas and those of template variables require quotation marks. Use escape characters, single quotation marks, or double quotation marks properly. Example: <code>templateParas='["3","Gate of People's Park"]'</code> - When calling the Batch SMS Sending API, set templateParas to a character string array. The value of templateParas does not require quotation marks, but the value of each template variable does. Example: <code>templateParas=["3","Gate of People's Park"]</code>

Value	Description	Handling Suggestion
E000 001	Authorization is not contained in the HTTP header.	- Check whether the HTTP message header contains the Authorization field. - Check whether the application key is empty or incorrect. - Check whether the difference between the input Created time and the current UTC time is less than 24 hours. Created indicates the UTC time when the random string is generated, for example, 2018-02-12T15:30:20Z. The time formats vary by programming language. For details, see Table 3-52. - Check whether the input value of passwordDigest matches the value of passwordDigest obtained using the encryption mode supported by the service. The value of passwordDigest is generated based on Base64 (SHA256 (Nonce + Created + Password)). The string consisting of Nonce, Created, and Password is SHA256 encrypted and does not contain plus signs (+) or spaces. Password indicates the value of application secret.
E000 002	realm is not contained in Authorization .	Check whether the Authorization field contains the realm attribute.
E000 003	profile is not contained in Authorization .	Check whether the Authorization field contains the profile attribute.
E000 004	The value of realm in Authorization must be SDP .	Check whether the value of realm in the Authorization field is SDP .
E000 005	The value of profile in Authorization must be UsernameToken .	Check whether the value of profile in the Authorization field is UsernameToken .
E000 006	The value of type in Authorization must be Appkey .	Check whether the value of type in the Authorization field is Appkey .
E000 007	type is not contained in Authorization .	Check whether the Authorization field contains the type attribute.
E000 008	WSSE is not contained in Authorization .	Check whether the Authorization field contains WSSE .

Value	Description	Handling Suggestion
E000 020	X-WSSE is not contained in the HTTP header.	Check whether the HTTP message header contains the X-WSSE field.
E000 021	UserName is not contained in X-WSSE .	Check whether the X-WSSE field contains the UserName attribute.
E000 022	Nonce is not contained in X-WSSE .	Check whether the X-WSSE field contains the Nonce attribute.
E000 023	Created is not contained in X-WSSE .	Check whether the X-WSSE field contains the Created attribute.
E000 024	PasswordDigest is not contained in X-WSSE .	Check whether the X-WSSE field contains the PasswordDigest attribute.
E000 025	The format of Created is incorrect.	Check whether the format of the Created attribute in the X-WSSE field is correct.
E000 026	UsernameToken is not contained in X-WSSE .	Check whether the X-WSSE field contains the UsernameToken attribute.
E000 027	Invalid request.	Check whether the parameters in the request are valid based on the parameter description and requirements in the API reference.
E000 040	The value of ContentType must be application/x-www-form-urlencoded .	Check whether the value of the ContentType header field is application/x-www-form-urlencoded . To send SMSs, set ContentType to application/x-www-form-urlencoded . To send SMSs in batches, set ContentType to application/json .
E000 101	Authentication failed.	Check whether the values of Authorization and X-WSSE are correct.
E000 102	app_key is invalid.	Check whether app_key in the request is correct. If app_key is correct, check whether the application access address (obtained from the Application Management page on the console) is correct.
E000 103	app_key is unavailable.	Contact the administrator to check whether the app_key status is normal.
E000 104	app_secret is invalid.	Check whether app_secret in the request is correct.
E000 105	PasswordDigest is invalid.	Check whether PasswordDigest in the request is correct.

Value	Description	Handling Suggestion
E000106	The app_key does not have the permission to call this API.	Contact the administrator to check whether the application corresponding to the app_key supports SMS capability exposure.
E000109	The user is deactivated.	Contact the administrator to activate the user.
E000110	The time exceeds the limit.	When X-WSSE authentication is used, make sure that there is not too much difference between the time when the random string is generated and the local time when the request is sent. For details, contact the administrator. Check whether the local time of the server is correct. It is recommended that the difference between the local time of the server and the Beijing time be less than or equal to 8 hours. Check the code for the Created parameter that indicates the random number generation time. Take Java as example. Change YYYY in the format string to yyyy. For details, see SMS Sending API.
E000111	Incorrect username or password.	The user information corresponding to app_key cannot be found. Contact the administrator.
E000112	The user is frozen.	If the account is frozen due to arrears, top up the account by referring to Topping Up an Account (Prepaid Direct Customers). Then, the account is automatically unfrozen. If the account is frozen due to violation, modify the service and contact the operation manager to apply for account unfreezing.

Value	Description	Handling Suggestion
E000 503	The parameter format is incorrect.	Check the parameter format. Types of format errors are listed as follows. Handle the problem based on the returned error message. • The template variable contains special characters. For details, see Template and Variable Specifications. • No template ID is carried. • No number is carried. • The format of the template ID is incorrect. A template ID can contain 1 to 32 characters. • The format of the mobile number is invalid. • The number quantity in a single request exceeds the upper limit. • smsContent is invalid. • The length of the extended field exceeds 128 bytes.
E000 510	The SMS fails to be sent. For details about the failure cause, see the status parameter.	Rectify the fault based on #EN-US_TOPIC_0000001514194918/en-us_topic_0000001174513143_table83994395_2015
E000 620	The peer application IP address is not in the whitelist.	• It takes about 10 to 15 minutes for the IP address whitelist configuration to take effect. This error may be reported if the configuration does not take effect in time. • The IP address whitelist configuration is incorrect. On the console, choose Application Management, click Modify, and check and modify the configured IP address whitelist, or add a correct IP address whitelist (when it is configured by the platform administrator).
E000 623	Number of SMSs sent reached the limit.	Adjust limit values of the total number of SMSs sent by referring to Settings. The default limit value of the total number of SMSs sent per day is 500. The default limit value of the total number of SMSs sent per month is 10,000. You can submit a service ticket to increase the limit values.
E000 628	Countries or regions of the recipient numbers are not in the whitelist.	Countries or regions of the recipient numbers are not added to the whitelist when you set the regional threshold, causing the SMS sending failure. Add countries or regions of the recipient numbers to the whitelist by referring to "Setting the Regional Threshold".

Troubleshooting Based on the status Parameter

Value	Description	Handling Suggestion
E200015	The number of SMSs to be sent exceeds the upper limit.	The SMS platform is performing flow control. Wait for about 10 minutes and try again.
E200028	The template variable verification failed.	Check the value of templateParas in the request. Check whether the number of variables in the template is correct and whether the length of the variables is less than the specified length of the template specified by templateId. If the template specified by templateId is a non-variable template, the request does not carry templateParas. If templateParas is included, leave it blank. For example: Your verification code is \${NUM_6}. Finish the verification as soon as possible. Have a nice day! Note: The template contains a variable of the numeric type. The variable contains a maximum of six digits. The following are examples of correct values: <code>templateParas=["12345"];</code> //API for sending SMS messages <code>templateParas=["345678"];</code> //API for sending SMS messages in batch The following are examples of incorrect values: <code>templateParas=["123","456"];</code> //API for sending SMS messages. The number of variables is incorrect. <code>templateParas=["1234567"];</code> //API for sending SMS messages. The variable length is incorrect. <code>templateParas=["1a2b3c"];</code> //API for sending SMS messages. The variable content type is incorrect.

Value	Description	Handling Suggestion
E200 029	The template type verification failed.	Check the values of templateId and from in the request and verify that the template ID, signature sender number, and type are correct. 1. Log in to the Message & SMS console. Choose European SMS > Template Management. Check Template Type and Signature based on the value of templateId. 2. Log in to the Message & SMS console. Choose European SMS > Signature Management. Check Signature Type and Signature Name based on the value of from. 3. Check whether the template type is consistent with the signature type, and whether the signature is consistent with the signature name. If a common signature is used, you do not need to check the consistency between the signature and signature name.
E200 030	The template is not activated.	Check whether the value of templateId in the request is correct.
E200 031	The protocol verification failed.	Check whether the values of Application Key and Application Secret are correct.
E200 033	The template type is incorrect.	Rectify the fault by referring to the recommendation for E200029 . Wait for about 10 minutes and send the request again.
E200 041	The recipient numbers of the same SMS are duplicate.	The SMS platform automatically deletes duplicate numbers and sends only one SMS to the number.

5.2.2 SMS Status Error Codes

NOTE

This section describes status codes provided by suppliers and the Huawei platform. **Press Ctrl+F to search for the target error codes and handling suggestions.**

Error codes are generated when the [SMS Sending API](#) or [Batch SMS Sending API](#) is called. For details, see [API Error Codes](#).

If **statusCallback** is specified after an API is called successfully, the SMS platform calls the [Status Report Receiving API](#) to send a status report to the platform user upon receiving the SMS status report from the SMSGW.

An example message is as follows:

```
POST /report HTTP/1.1
Host: 10.10.111.168:9330
Content-Type: application/x-www-form-urlencoded
Connection: close
Pooltype: appoxy
OmpsId: 7f540777fe4b40dfb3c21d10f48781e3
TerminalIP: 10.10.112.18
TrcModule: AP
UserTrace: application
TraceHandle: DMZ_818405
```

```
sequence=1&total=1&orgCode=000&updateTime=2018-04-13T06%3A31%3A46Z&source=2&smsMsgId=b9d9b4fe-ad0e-4a2a-a2c7-445505b674ac_6&status=DELIVRD
```

Troubleshooting Based on the status Parameter

Statu s Code Source	Statu s Code	Descripti on	Possible Cause	Handling Suggestion
Suppl ier platfo rm	DELIV RD	The SMS was sent successfull y and the user has received the SMS.	-	-
Suppl ier platfo rm	EXPIR ED	The SMS timed out.	- The phone is powered off for a long time or is out of the service area. As a result, the SMS times out and is not delivered to the user. - The SMS platform does not receive a status report from the SMSGW within 72 hours after sending the SMS.	- During the commissioning, use real mobile numbers for tests. - After commercial use is available, if a large number of SMSs time out, record related information and contact the operation manager.
Suppl ier platfo rm	DELE TED	The SMS has been deleted.	N/A	N/A

Statu s Code Sourc e	Statu s Code	Descripti on	Possible Cause	Handling Suggestion
Huaw ei/ Suppl ier platfo rm (For detail s, see the value of sourc e in statu s repor ts.)	UND ELIV	The SMS fails to be delivered.	- The phone number is a dead number, the subscriber is suspended due to a balance owed, or the phone was powered off for a long time. - The user cannot receive SMSs because of user status, for example, the account may be suspended. - The SMS channel is abnormal.	- Check whether the mobile number is reachable and in the normal state. - If sending a large number of SMS messages fails or mobile number status is normal, contact Huawei Cloud customer service.
Suppl ier platfo rm	ACCE PTD	The SMS is accepted.	Temporary SMS status. Generally, this value is not displayed.	N/A
Suppl ier platfo rm	UNK NOW N	The SMS status is unknown.	- Unknown error. - The phone number is a dead number or in the incorrect format.	- Check whether the mobile number is reachable and in the normal state. - Record related information and contact the operation manager.
Suppl ier platfo rm	REJEC TD	The SMS has been rejected.	- Before the SMS is sent, the recipient has sent an unsubscribe SMS for the SMS sender number (signature). The recipient no longer receives SMSs from this sender number. - The Message & SMS service is not enabled.	- Replace the mobile phone number and test it again. - Delete the number from the list of SMS recipient numbers.

Statu s Code Sourc e	Statu s Code	Descripti on	Possible Cause	Handling Suggestion
Huaw ei platfo rm	E200 018	Failed to verify the Chinese mainland SMS sender channel.	The channel number transferred by from does not match the channel number of the application.	Check whether the signature channel number transferred by from belongs to the application (APP_Key).
Huaw ei platfo rm	E200 019	Failed to match the Chinese mainland SMS sender channel.	- The signature of the application (APP_Key) is not approved, or the channel number is not allocated. - The configured channel does not take effect. - The channel number transferred by from is incorrect.	Check whether the signature of the application (APP_Key) has been approved and the channel number has been allocated. Check whether the channel number transferred by from is correct. Wait for about 10 minutes and send the request again.
Huaw ei platfo rm	E200 020	Failed to verify the Chinese mainland SMS signature channel.	The signature in the SMS does not match the channel signature.	Check whether the signature corresponding to the channel number transferred by from is the same as the signature corresponding to templateId .
Huaw ei platfo rm	E200 021	Failed to match the Chinese mainland SMS signature channel.	No channel is configured for the application.	Record related error information and contact the operation manager.
Huaw ei platfo rm	E200 022	Failed to verify the Chinese mainland SMS recipient channel.	- The recipient number is not supported by the application. - The recipient number does not support the channel.	Contact the operation manager to confirm the recipient numbers and delete any numbers that are not supported by the channel (that is, the value of to).

Statu s Code Sourc e	Statu s Code	Descripti on	Possible Cause	Handling Suggestion
Huaw ei platfo rm	E200 023	Failed to match the Chinese mainland SMS recipient channel.	The recipient number is not in the carrier code table configured for the application.	Record related error information and contact the operation manager.
Huaw ei platfo rm	E200 024	The SMS function is not available.	The SMS function is not enabled.	Check whether the recipient numbers in the to parameter contain numbers from countries or regions outside the Chinese mainland. If yes, delete the numbers and try again. Check the value of APP_Key and channel number in the from parameter to determine whether the SMS function is supported.
Huaw ei platfo rm	E200 025	Cannot verify the SMS recipient channel.	- The recipient number is not supported by the application. - The recipient number does not support the channel.	Contact the operation manager to confirm the recipient numbers and delete any numbers that are not supported by the channel (that is, the value of to). If a general template is used (a general signature is a used), the signature parameter is Mandatory.

Statu s Code Sourc e	Statu s Code	Descripti on	Possible Cause	Handling Suggestion
Huaw ei platfo rm	E200 026	Cannot match the SMS recipient channel.	- The recipient number is not in the carrier code table configured for the application. - No channel number is configured in the from parameter, and no channel is configured for the application.	Record related error information and contact the operation manager.
Huaw ei platfo rm	E200 027	Failed to match the gateway.	Routing information such as the gateway is not configured for the application.	- Check whether the SMS signature needs to be activated. - Record related information and contact Huawei Cloud customer service.
Huaw ei platfo rm	E200 032	The SMS template is required.	The SMS to be sent does not contain template parameters.	- Check whether the request contains template parameters (templateId and templateParas). - The plus sign (+) is not added to the mobile number for sending SMSs. The system automatically adds "+86" to the mobile number. As a result, an error is reported.
Huaw ei platfo rm	E200 034	The SMS retransmission times out.	The SMS gateway is faulty.	Record related error information and contact the operation manager.
Huaw ei platfo rm	E200 035	Failed to replace the SMS protocol field.	The protocol replacement content does not comply with the protocol specifications.	Record related error information and contact the operation manager.

Statu s Code Sourc e	Statu s Code	Descripti on	Possible Cause	Handling Suggestion
Huaw ei platfo rm	E200 036	The southbou nd rate control configurat ion is 0.	The rate of the channel for sending the SMS is 0.	Record related error information and contact the operation manager.
Huaw ei platfo rm	E200 038	Long SMS receiving times out.	This error code is reported if the SMS platform does not receive a complete long SMS request within the timeout period (3 minutes by default).	Check the code and network to ensure that the long SMS request can be sent within a period.
Huaw ei platfo rm	E200 040	Intercepte d by the Huawei Cloud internal platform after review.	Invalid signature template.	Check whether the signature template is consistent with the approved one. If the fault persists, contact Huawei Cloud customer service.
Huaw ei platfo rm	E000 628	Intercepte d by the Huawei Cloud internal platform after review.	Countries or regions of the recipient numbers are not in the whitelist.	Countries or regions of the recipient numbers are not added to the whitelist when you set regions , causing the SMS sending failure. Add countries or regions of the recipient numbers to the whitelist on the Settings page on the console.
Suppl ier platfo rm	MILI MIT	Reached the maximum number of SMSs sent to a recipient number per minute.	Too many SMSs are sent to the recipient number within one minute.	Wait for one minute and resend the SMS. If you need to send more SMSs to this recipient number within one minute, contact the operation manager to cancel the restriction.

Statu s Code Sourc e	Statu s Code	Descripti on	Possible Cause	Handling Suggestion
Suppl ier platfo rm	LIMIT	Reached the maximum number of SMSs sent to a recipient number.	The maximum number of allowed SMS for a given recipient on a single day has been reached.	Send the SMS to the recipient number on the next day. If you need to be able to send more SMSs to one recipient within a single day, contact the operation manager to remove the restriction.
Suppl ier platfo rm	BEYO NDN			
Suppl ier platfo rm	KEYW ORD	The SMS is intercepte d due to keywords.	The SMS contains sensitive keywords.	Delete the keyword and send the SMS. For details, see Template and Variable Specifications .
Suppl ier platfo rm	BLAC K	The phone number is blacklisted .	The phone number has been blacklisted. It may have previously sent an unsubscribe SMS.	If SMSs must be sent to this phone number, contact the operation manager to unblacklist it.
Suppl ier platfo rm	MBBL ACK			
Suppl ier platfo rm	DJ:02 55	The SMS is intercepte d by the carrier.	The SMS content is not allowed.	Record the SMS message content and contact the operation manager to confirm the reason why the SMS message cannot be sent.
Suppl ier platfo rm	1	SMS sending failed.	The phone numbers are dead, powered off, or suspended.	Check whether the phone number is normal. If the phone number is normal, contact the operation manager.
Suppl ier platfo rm	24			
Suppl ier platfo rm	MK:x xxx			

Statu s Code Sourc e	Statu s Code	Descripti on	Possible Cause	Handling Suggestion
Suppl ier platfo rm	MN:x xxx			
Suppl ier platfo rm	LT:00 01			
Huaw ei platfo rm	SC:00 01	The SMS is intercepte d due to manual review.	The SMS content is intercepted due to non-compliance, which triggers manual review.	Check whether the SMS content contains sensitive words. If yes, change the template variables and try again. For details, see Template and Variable Specifications. Contact the operation manager to confirm the sensitive word interception and apply for a new template, or confirm that the template is correct and apply for canceling the interception.
Huaw ei platfo rm	SC:00 02	The SMS is intercepte d due to the manual review alarm.		
Huaw ei platfo rm	SC:00 03	The SMS is intercepte d due to the blacklist.	The recipient number is intercepted by the Huawei Cloud internal platform due to its special state.	- Delete the special number from the recipient number list and try again. - On the console, choose General Management > Blocklist Management and apply for unblocking the number.

Statu s Code Sourc e	Statu s Code	Descripti on	Possible Cause	Handling Suggestion
Huaw ei platfo rm	SC:00 04	The SMS is intercepte d due to the redlist.		- Delete the special number from the recipient number list and try again. - Provide the number information and contact the operation manager to unblock the number.
Huaw ei platfo rm	SC:00 05	The SMS is intercepte d due to the complaint blacklist.		
Huaw ei platfo rm	SC:00 06	The SMS is intercepte d due to forbidden keywords.	The SMS is intercepted by the Huawei Cloud internal platform due to non-compliant content.	Check whether the SMS content contains sensitive words. If yes, change the template variables and try again. For details, see Template and Variable Specifications .
Huaw ei platfo rm	SC:00 07	The SMS is intercepte d due to feature keywords.		
Huaw ei platfo rm	SC:00 08	The SMS is intercepte d due to control keywords.		
Huaw ei platfo rm	SC:00 09	The SMS is intercepte d due to lack of mandator y keywords.		

Statu s Code Sourc e	Statu s Code	Descripti on	Possible Cause	Handling Suggestion
Huaw ei platfo rm	SC:00 10	The SMS is intercepte d due to the excessivel y high sending frequency.	The SMS is intercepted by the Huawei Cloud internal platform due to excessively high sending frequency.	- Control the frequency of sending SMSs. Send SMSs in batches in different time periods. - Send the SMSs again 24 hours after the status code is generated
Huaw ei platfo rm	SC:00 11	The SMS is intercepte d due to non- compliant sending time.	The SMS is intercepted by the Huawei Cloud internal platform due to non-compliant sending time.	Select a valid period and send the SMS again.
Huaw ei platfo rm	SC:00 12	Manual review times out.	The SMS content is not processed within the specified time period after the manual review is triggered.	Record related error information and contact the operation manager.
Huaw ei platfo rm	SC:00 13	The SMS is intercepte d due to the signature blacklist.	The SMS is intercepted by the Huawei Cloud internal platform because the signature matches the unsubscription blacklist.	Check whether you have unsubscribed from the Message & SMS service for the Huawei Cloud account, causing the SMS signature to enter the unsubscription blacklist. Collect the Huawei Cloud account information and SMS signature information and contact the operation manager.
Huaw ei platfo rm	SC:00 14	Matching the review- free template fails.	The SMS is intercepted by the Huawei Cloud internal platform because the SMS content fails to match the review-free template.	Record the SMS content and template content and contact the operation manager.

Statu s Code Sourc e	Statu s Code	Descripti on	Possible Cause	Handling Suggestion
Huaw ei platfo rm	SC:00 15	The SMS matches the interceptio n template.	The SMS is intercepted by the Huawei Cloud internal platform because the SMS content matches the interception template.	Check whether the SMS content contains sensitive words. If yes, change the template variables and try again. For details, see Template and Variable Specifications .
Huaw ei platfo rm	SC:00 16	The SMS is intercepte d due to the unsubscrip tion blacklist.	The subscriber sending the SMS is in the unsubscription blacklist.	Contact the operation manager to delete the subscriber from the unsubscription blacklist.
Huaw ei platfo rm	SC:00 17	The SMS is intercepte d due to the non- registratio n template.	The subscriber has not applied for the SMS template.	You are advised to apply for a required SMS template or use an applied template.
Huaw ei platfo rm	SC:00 18	The SMS is intercepte d due to the non- registratio n signature.	The subscriber has not applied for the SMS signature.	You are advised to apply for a required SMS signature or use an applied signature.

6 Change History

Date	Description
2023/04/23	New release.