

# Simple Message Notification

## Getting Started

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# 1 Making Preparations

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Before you use SMN, make the following preparations:

- [Creating a HUAWEI ID and Enabling Huawei Cloud Services](#)
- [Topping Up Your Account](#)

## Creating a HUAWEI ID and Enabling Huawei Cloud Services

If you already have a HUAWEI ID, skip this section. If you do not have one, perform the following operations to create an ID:

1. Visit the [Huawei Cloud official website](#) and click **Sign Up**.
2. On the displayed **Register Huawei ID** page, sign up an ID.

After you sign up successfully, the system automatically redirects you to your personal information page.

## Topping Up Your Account

Ensure that your account balance is sufficient.

- For SMN pricing details, see [Product Pricing Details](#).
- For details about how to top up an account, see [Topping Up an Account \(Prepaid Direct Customers\)](#).

# 2 Before You Publish a Message

After you learn the basic concepts in SMN, you can start to create a topic, add subscriptions to the topic, and publish messages on the SMN console or by calling RESTful APIs provided by SMN.

## Message Types

You can publish different formats of messages using SMN.

**Table 2-1** Message formats

Message Format	Scenarios	Reference
JSON message	Send different message content to different types of subscribers with only one message publishing.	<a href="#">Publishing a JSON Message</a>
Template message	Send messages containing fixed content and variables that can be easily set to desired content.	<a href="#">Publishing a Template Message</a>

## Registering with Huawei Cloud

If you have registered with Huawei Cloud, you can log in to the management console and access SMN. Otherwise, register yourself with Huawei Cloud.

1. Visit [huaweicloud.com/intl/en-us/](https://huaweicloud.com/intl/en-us/).
2. Click **Register** in the upper right corner.

The registration page is displayed. Enter required information as prompted. After the registration, the system automatically redirects you to your personal information page.

The account can be used to access the SMN service and all other Huawei Cloud services.

# 3 Publishing a JSON Message Using SMN

## Scenarios

You can publish a JSON message to an SMN topic to broadcast the message to different types of subscription endpoints in the topic.

To start your experience with SMN, this topic describes how to create a topic and publish a JSON message.

## Operation Process

Procedure	Description
<b>Making Preparations</b>	Sign up for a HUAWEI ID, complete real-name authentication, enable Huawei Cloud services, and top up your account.
<b>Step 1: Create a Topic</b>	Create a topic <b>Mytopic</b> .
<b>Step 2: Add a Subscription</b>	Add SMS and email subscriptions to the topic.
<b>Step 3: Publish a Message</b>	<ul style="list-style-type: none"><li>• Publish a message "Dear Sir or Madam, this is an SMS message." to the SMS subscriber.</li><li>• Publish a message "Dear Sir or Madam, this is an Email message." to the email subscriber.</li></ul>
<b>Step 4: Receive the Message</b>	The subscription endpoints receive the messages.

## Making Preparations

1. Sign up for Huawei Cloud and complete real-name authentication.  
Before using SMN, **sign up for a HUAWEI ID, enable Huawei Cloud services, and complete real-name authentication.**  
If you have enabled Huawei Cloud services and completed real-name authentication, skip this step.

2. Top up your account.  
Ensure that the account balance is sufficient. If not, [top up your account](#).

## Step 1: Create a Topic

1. Log in to the SMN console and go to the [Create Topic](#) page.
2. Configure topic parameters.

In this example, only some parameters are described. Retain the default values for other parameters. For details about the parameters, see [Creating a Topic](#).

**Figure 3-1** Create Topic

The screenshot shows the 'Create Topic' form with the following fields and values:

- Topic Name:** Mytopic. Below the input field, it says: "The name cannot be changed after the topic is created."
- Display Name:** (Empty input field). Below the input field, it says: "If a display name is specified, the email sender is presented in the format 'Display name-username@example.com' when email messages are delivered."
- Enterprise Project:** default. To the right of the dropdown is a link: "Create Enterprise Project". Below the dropdown, it says: "Enterprise Project Management Service (EPS) allows you to manage cloud resources and user groups by enterprise project."
- CTS Log:** A toggle switch is turned off.
- Tag:** "+ Add Tag". Below the link, it says: "You can add 20 more tags."

**Table 3-1** Parameters for creating a topic

Parameter	Example Value	Description
Topic Name	Mytopic	Specifies the name of the topic to be created.
Enterprise Project	default	This parameter is displayed only for enterprise users who have enabled enterprise project management.

3. Click **OK**.  
After a topic is created, the system generates a topic URN, which uniquely identifies the topic and cannot be changed. The topic you created is displayed in the topic list.

## Step 2: Add a Subscription

Add SMS and email subscriptions to the topic.

### Adding an SMS Subscription

1. In the topic list, locate **Mytopic** and click **Add Subscription** in the **Operation** column.
2. Configure subscription parameters.



In this example, only some parameters are described. Retain the default values for other parameters. For details about the parameters, see [Creating a Topic](#).

**Figure 3-2** Add Subscription

**Table 3-2** Parameters for adding an SMS subscription

Parameter	Example Value	Description
Topic Name	Mytopic	Specifies the name of the topic you select to add subscriptions.

Parameter	Example Value	Description
Protocol	SMS	Select <b>SMS</b> from the <b>Protocol</b> drop-down list. For more supported protocols, see <a href="#">What Protocols Does SMN Support?</a>
Endpoint	+8618612345678	Enter a valid mobile number in the text box. <ul style="list-style-type: none"><li>You can enter up to 10 endpoints, each on a separate line.</li><li>SMN does not check whether subscription endpoints exist when you add subscriptions.</li></ul>

3. Click **OK**.

After a subscription is added, the subscription endpoint receives a confirmation message. The recipient needs to click the subscription confirmation link on the subscription endpoint to confirm that they agree to receive messages published to the topic. On the SMN console, you can see that the subscription status is **Confirmed**.

## Adding an Email Subscription

1. In the topic list, locate **Mytopic** and click **Add Subscription** in the **Operation** column.
2. Configure subscription parameters.

In this example, only some parameters are described. Retain the default values for other parameters. For details about the parameters, see [Creating a Topic](#).

**Figure 3-3** Add Subscription

**Add Subscription**
✕

**Basic Information**

Topic Name Mytopic

\* Protocol Email

⚠ If you add SMS, email, or HTTP/HTTPS subscriptions to a topic, you will be billed as described in [pricing details](#).

\* Endpoint ?

Endpoints	Description
username@example.com	
<a href="#">+ Add Endpoint</a> <a href="#">Batch Add Endpoints</a>	

ℹ After your subscription is added, you must confirm it. ?

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**Filter Policy** 🔴

Filter policies allow you to limit which subscription endpoints the message will be sent to.

Cancel
OK

**Table 3-3** Parameters for adding an email subscription

Parameter	Example Value	Description
Topic Name	Mytopic	Specifies the name of the topic you select to add subscriptions.
Protocol	Email	Select <b>Email</b> from the <b>Protocol</b> drop-down list. For more supported protocols, see <a href="#">What Protocols Does SMN Support?</a>

Parameter	Example Value	Description
Endpoint	username@example.com	Enter a valid email address in the text box. <ul style="list-style-type: none"><li>You can enter up to 10 endpoints, each on a separate line.</li><li>SMN does not check whether subscription endpoints exist when you add subscriptions.</li></ul>

3. Click **OK**.

After a subscription is added, the subscription endpoint receives a confirmation message. The recipient needs to click the subscription confirmation link on the subscription endpoint to confirm that they agree to receive messages published to the topic. On the SMN console, you can see that the subscription status is **Confirmed**.

### Step 3: Publish a Message

1. In the topic list, locate **Mytopic** and click **Publish Message** in the **Operation** column.
2. Configure parameters for publishing a message.

In this example, only some parameters are described. Retain the default values for other parameters. For details about the parameters, see [Publishing a JSON Message](#).

**Figure 3-4** Publish Message

✕

### Publish Message

**Basic Information**

Topic Name

Subject

★ Message Format  Text  JSON  Template

★ Message 

```
{
  "default": "Dear Sir or Madam, this is a default message.",
  "sms": "Dear Sir or Madam, this is an SMS message.",
  "email": "Dear Sir or Madam, this is an Email message."
}
```

Select JSON to send different messages to endpoints of different protocols.  
There are 184 bytes, and an additional 262144 bytes can be entered.  
[Learn more](#) about the message format.

Generate JSON Message

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**Message Attributes**

Message attributes are used to limit which subscription endpoints the message will be sent to.

Type	Name	Value
<input type="text" value="--Select--"/>	<input type="text"/>	<input type="text"/>

[+ Add More Attributes.](#)

Cancel
OK

**Table 3-4** Parameters for publishing a message

Parameter	Example Value	Description
Topic Name	Mytopic	Specifies the name of the topic you select to publish a message.
Message Format	JSON	Specifies in which format messages will be sent.

Parameter	Example Value	Description
Message	<pre>{   "default": "Dear Sir or Madam, this is a default message.",   "sms": "Dear Sir or Madam, this is an SMS message.",   "email": "Dear Sir or Madam, this is an Email message." }</pre>	<p>You can manually enter a message in JSON format or click <b>Generate JSON Message</b> to automatically generate a message.</p> <p>For details, see <a href="#">JSON Message Format</a>.</p>

3. Click **OK**.

For details about messages, see [Messages Using Different Protocols](#).

## Step 4: Receive the Message

Subscription endpoints of different protocols receive different messages.

- SMS  
SMS messages only contain the message content.
- Email  
Email messages contain the message subject, content, and a link to unsubscribe.

# 4 Publishing a Template Message

## Scenarios

You can publish a template message to an SMN topic when:

Most of the content in the messages is fixed, and only a few parts vary with the occasions. In this scenario, you can create a message template and use variables as placeholders to indicate changeable content. Each time when you publish a message, you can select a template and set values only for variables without having to edit the message content repeatedly.

This topic describes how to create a topic and publish a template message.

For example, your organization holds expositions regularly, and you need to notify people of the time. Except for the time, most part of the message remains unchanged.

## Operation Process

Procedure	Description
<b>Making Preparations</b>	Sign up for a HUAWEI ID, complete real-name authentication, enable Huawei Cloud services, and top up your account.
<b>Step 1: Create a Topic</b>	Create a topic <b>Mytopic</b> .
<b>Step 2: Add a Subscription</b>	Add SMS and email subscriptions to the topic.
<b>Step 3: Create a Message Template</b>	Create a message template named <b>tem_001</b> and select <b>Default</b> , <b>SMS</b> , and <b>Email</b> for <b>Protocol</b> separately.
<b>Step 4: Publish a Message</b>	Publish a message to SMS and email endpoints: <b>The Arts and Crafts Exposition will be held from {startdate} through {enddate}. We sincerely invite you to join us.</b> <i>{startdate}</i> indicates when the exposition will be started. <i>{enddate}</i> indicates when the exposition will be ended.

Procedure	Description
<a href="#">Step 5: Receive the Message</a>	The subscription endpoints receive the message.

## Making Preparations

1. Sign up for Huawei Cloud and complete real-name authentication.  
Before using SMN, [sign up for a HUAWEI ID, enable Huawei Cloud services, and complete real-name authentication](#).  
If you have enabled Huawei Cloud services and completed real-name authentication, skip this step.
2. Top up your account.  
Ensure that the account balance is sufficient. If not, [top up your account](#).

## Step 1: Create a Topic

1. Log in to the SMN console and go to the [Create Topic](#) page.
2. Configure topic parameters.  
In this example, only some parameters are described. Retain the default values for other parameters. For details about the parameters, see [Creating a Topic](#).

**Figure 4-1** Create Topic

The screenshot shows the 'Create Topic' form with the following fields and values:

- Topic Name:** Mytopic. Below the input field, it says: "The name cannot be changed after the topic is created."
- Display Name:** (empty input field). Below the input field, it says: "If a display name is specified, the email sender is presented in the format 'Display name<username@example.com>' when email messages are delivered."
- Enterprise Project:** default. To the right of the dropdown is a link: "Create Enterprise Project". Below the dropdown, it says: "Enterprise Project Management Service (EPS) allows you to manage cloud resources and user groups by enterprise project."
- CTS Log:** A toggle switch is currently turned off.
- Tag:** (empty input field). Below the input field, it says: "TMS's predefined tags are recommended for adding the same tag to different cloud resources. Create predefined tags". Below that is a "+ Add Tag" link and "You can add 20 more tags."

**Table 4-1** Parameters for creating a topic

Parameter	Example Value	Description
Topic Name	Mytopic	Specifies the name of the topic to be created.
Enterprise Project	default	This parameter is displayed only for enterprise users who have enabled enterprise project management.



3. Click **OK**.

After a topic is created, the system generates a topic URN, which uniquely identifies the topic and cannot be changed. The topic you created is displayed in the topic list.

## Step 2: Add a Subscription

Add SMS and email subscriptions to the topic.

### Adding an SMS Subscription

1. In the topic list, locate **Mytopic** and click **Add Subscription** in the **Operation** column.
2. Configure subscription parameters.  
In this example, only some parameters are described. Retain the default values for other parameters. For details about the parameters, see [Creating a Topic](#).

**Figure 4-2** Add Subscription

### Add Subscription

✕

**Basic Information**

Topic Name

\* Protocol  ▼

⚠ If you add SMS, email, or HTTP/HTTPS subscriptions to a topic, you will be billed as described in [pricing details](#).

\* Endpoint ?

Endpoints	Description
<input type="text" value="+8618612345678"/>	<input type="text"/>

[+ Add Endpoint](#)  
[Batch Add Endpoints](#)

i After your subscription is added, you must confirm it. ?

---

**Filter Policy**

Filter policies allow you to limit which subscription endpoints the message will be sent to.

Cancel
OK

**Table 4-2** Parameters for adding an SMS subscription

Parameter	Example Value	Description
Topic Name	Mytopic	Specifies the name of the topic you select to add subscriptions.
Protocol	SMS	Select <b>SMS</b> from the <b>Protocol</b> drop-down list. For more supported protocols, see <a href="#">What Protocols Does SMN Support?</a>

Parameter	Example Value	Description
Endpoint	+8618612345678	Enter a valid mobile number in the text box. <ul style="list-style-type: none"><li>You can enter up to 10 endpoints, each on a separate line.</li><li>SMN does not check whether subscription endpoints exist when you add subscriptions.</li></ul>

3. Click **OK**.

After a subscription is added, the subscription endpoint receives a confirmation message. The recipient needs to click the subscription confirmation link on the subscription endpoint to confirm that they agree to receive messages published to the topic. On the SMN console, you can see that the subscription status is **Confirmed**.

## Adding an Email Subscription

1. In the topic list, locate **Mytopic** and click **Add Subscription** in the **Operation** column.
2. Configure subscription parameters.

In this example, only some parameters are described. Retain the default values for other parameters. For details about the parameters, see [Creating a Topic](#).

**Figure 4-3** Add Subscription

**Add Subscription**
✕

**Basic Information**

Topic Name Mytopic

\* Protocol Email

⚠ If you add SMS, email, or HTTP/HTTPS subscriptions to a topic, you will be billed as described in [pricing details](#).

\* Endpoint ?

Endpoints	Description
username@example.com	

[+ Add Endpoint](#)  
[Batch Add Endpoints](#)

ℹ After your subscription is added, you must confirm it. ?

---

**Filter Policy** 🔴

Filter policies allow you to limit which subscription endpoints the message will be sent to.

Cancel
OK

**Table 4-3** Parameters for adding an email subscription

Parameter	Example Value	Description
Topic Name	Mytopic	Specifies the name of the topic you select to add subscriptions.
Protocol	Email	Select <b>Email</b> from the <b>Protocol</b> drop-down list. For more supported protocols, see <a href="#">What Protocols Does SMN Support?</a>

Parameter	Example Value	Description
Endpoint	username@example.com	<p>Enter a valid email address in the text box.</p> <ul style="list-style-type: none"> <li>You can enter up to 10 endpoints, each on a separate line.</li> <li>SMN does not check whether subscription endpoints exist when you add subscriptions.</li> </ul>

3. Click **OK**.

After a subscription is added, the subscription endpoint receives a confirmation message. The recipient needs to click the subscription confirmation link on the subscription endpoint to confirm that they agree to receive messages published to the topic. On the SMN console, you can see that the subscription status is **Confirmed**.

### Step 3: Create a Message Template

1. In the navigation pane on the left, choose **Topic Management > Message Templates**.
2. On the displayed page, click **Create Message Template** in the upper right corner.
3. Configure message template parameters.

In this example, only some parameters are described. Retain the default values for other parameters. For details about the parameters, see [Message Template Management](#).

**Figure 4-4** Create Message Template

**Create Message Template**
✕

Template Name

If a template ABC will be used to publish messages, you must create a template named ABC by using the default protocol, and then create other templates named ABC by using other protocols, such as SMS and email. Otherwise, template ABC cannot be used to publish messages.

Protocol

Content 

The Arts and Crafts Exposition will be held from {startdate} through {enddate}. We sincerely invite you to join us.

Use variables quoted by brackets, for example, {xxx}, as placeholders to represent changeable content in the template. A variable contains a maximum of 21 characters consisting of letters, digits, hyphens (-), underscores (\_), or periods (.) and must start with a letter or digit. Before publishing messages using a template, you can replace variables with specific content.

**Table 4-4** Parameters for creating a message template

Parameter	Example Value	Description
Template Name	tem_001	Specifies the name of the template to be created.
Protocol	<ul style="list-style-type: none"><li>• Default</li><li>• SMS</li><li>• Email</li></ul>	Create a message template named <b>tem_001</b> and select <b>Default</b> , <b>SMS</b> , and <b>Email</b> separately.
Content	<b>The Arts and Crafts Exposition will be held from {startdate} through {enddate}. We sincerely invite you to join us.</b>	Customize the template content. Use {xxx} as the placeholder to create a template. When you use this template to publish messages, replace {xxx} with specific content. xxx must start with a letter or digit and can contain up to 21 characters, including only letters, digits, hyphens (-), periods (.), and underscores (_).

4. Click **OK**.

The template you created is displayed in the template list.

## Step 4: Publish a Message

1. In the navigation pane on the left, choose **Topic Management > Topics**.
2. Locate **Mytopic** and click **Publish Message** in the **Operation** column.

**Figure 4-5** Publish Message

✕

### Publish Message

**Basic Information**

Topic Name Mytopic

Subject

★ Message Format  Text  JSON  Template

★ Message

```
{
  "message_template_name": "tem_001",
  "tags": {
    "startdate": "08/02/2024",
    "enddate": "08/20/2024"
  }
}
```

Select Template to use a predefined template to publish messages.  
There are 130 bytes, and an additional 262144 bytes can be entered.  
[Learn more](#) about the message format.

---

**Message Attributes**

Message attributes are used to limit which subscription endpoints the message will be sent to.

Type	Name	Value
--Select-- <span style="float: right;">▼</span>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>

[+ Add More Attributes.](#)

**Table 4-5** Parameters for publishing a message

Parameter	Example Value	Description
Topic Name	Mytopic	Specifies the name of the topic you select to publish a message.
Message Format	Template	Specifies in which format messages will be sent.

Parameter	Example Value	Description
Message	<pre>{   "message_template_name":   "tem_001",   "tags": {     "startdate":     "08/02/2024",     "enddate":     "08/20/2024"   } }</pre>	<p>You can manually enter a template message or click <b>Generate template Message</b> to automatically generate a message.</p> <p>For details, see <a href="#">Template Message Format</a>.</p>

3. Click **OK**.

For details about messages, see [Messages Using Different Protocols](#).

## Step 5: Receive the Message

Subscription endpoints of different protocols receive different messages.

- SMS  
SMS messages only contain the message content.
- Email  
Email messages contain the message subject, content, and a link to unsubscribe.