

Simple Message Notification

Getting Started

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Security Declaration

Vulnerability

Huawei's regulations on product vulnerability management are subject to the *Vul. Response Process*. For details about this process, visit the following web page:

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For vulnerability information, enterprise customers can visit the following web page:

<https://securitybulletin.huawei.com/enterprise/en/security-advisory>

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1 Making Preparations

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.	Publishing a JSON Message
Template message	Send messages containing fixed content and variables that can be easily set to desired content.	Publishing a Template Message

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/.
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

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.

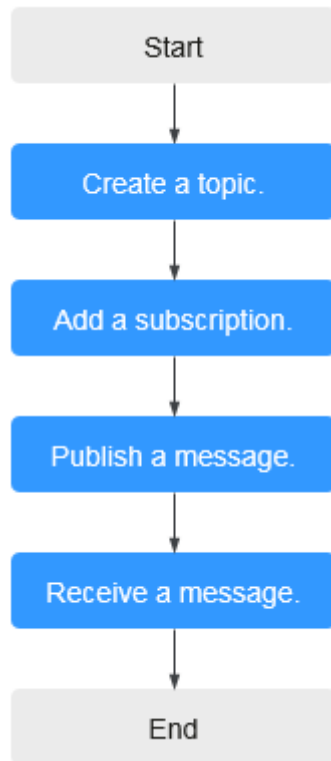
We will walk you through the following operations in the example:

- Create a topic **Mytopic**.
- Add SMS and email subscriptions to the topic.
- Publish a message "Dear Sir or Madam, this is an SMS message." to the SMS subscriber.
- Publish a message "Dear Sir or Madam, this is an email message." to the email subscriber.

Operation Process

[Figure 3-1](#) shows the process to publish a JSON message.

Figure 3-1 Process of publishing a JSON message



Step 1. Create a Topic


1. Log in to the management console.
2. Click  on the upper left to select the desired region and project.
3. Under **Management & Governance**, select **Simple Message Notification**.
The SMN console is displayed.
4. In the navigation pane, choose **Topic Management > Topics**.
5. In the upper right corner, click **Create Topic**.

Figure 3-2 Create Topic

Create Topic ✕

* Topic Name
The name cannot be changed after the topic is created.

Display Name
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 🔍 [Create Enterprise Project](#)
Enterprise Project Management Service (EPS) allows you to manage cloud resources and user groups by enterprise project.

CTS Log

Tag
It is recommended that you use TMS's predefined tag function to add the same tag to different cloud resources. [View predefined tags](#) 🔍
To add a tag, enter a tag key and a tag value below.

Tags you can still add: 20

6. Set **Topic Name** to **Mytopic**.

NOTE

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

7. 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.

8. Click the name of the topic to view its details, including the topic URN, display name, and subscriptions.

Figure 3-3 Topic details and subscriptions

Topic Details

Topic Name: my* URN: urn:cts:smn:v1:topic:my*
ID: 8610250644435059c70119987c3e Display Name: -_2
Created: Apr 22, 2022 11:03:11 GMT+08:00 Enterprise Project: default

Subscriptions Tags Logs

Subscription URN	Protocol	Endpoint	Status	Request Header	Description	Operation
<input type="checkbox"/>	SMS	<input type="text"/>	Unconfirmed	-	-	Request Confirmation Edit Delete

Step 2. Add a Subscription

1. In the navigation pane, choose **Topic Management > Subscriptions**.
2. On the **Subscriptions** page, click **Add Subscription**.
The **Add Subscription** dialog box is displayed.

Figure 3-4 Add Subscription

Add Subscription ×

Basic Information

* Topic Name Select Topic

* 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"/>	<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

3. Add an SMS subscription to a topic.
 - a. Click **Select Topic** beside the **Topic Name** box to select **Mytopic**.
 - b. Select **SMS** from the **Protocol** drop-down list.
 - c. In the **Endpoint** box, enter the subscription endpoint, for example, **+8618512345678**.
Enter one endpoint on a separate line.

Figure 3-5 Add Subscription (SMS)

Add Subscription ×

Basic Information

* Topic Name Select Topic

* Protocol

Endpoint ?

Endpoints	Description
<input type="text" value="+8618512345678"/>	<input type="text"/>

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

Filter Policy ☐

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

Cancel OK

- d. Click **OK**.
4. Add an email subscription to a topic.
 - a. Click **+** beside the **Topic Name** box to select **Mytopic**.
 - b. Select **Email** from the **Protocol** drop-down list.
 - c. In the **Endpoint** box, enter the subscription endpoint.
Enter one endpoint on a separate line.

Figure 3-6 Add Subscription (Email)

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="username@example.com"/>	<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.

d. Click **OK**.

After a subscription is added, the subscription endpoint receives a confirmation message. Confirm the subscription so that the endpoint can receive messages published to the topic.

 NOTE

- For more details, see [Adding a Subscription](#).
- To prevent malicious users from attacking subscription endpoints, SMN limits the number of confirmation messages that can be sent to an endpoint within a specified period of time. For details, see section "Traffic Control on Subscription Confirmation" in *Simple Message Notification User Guide*.
- SMN does not check whether subscription endpoints exist when you add subscriptions. However, subscribers will not receive notification messages until they confirm their subscriptions.
- After you add a subscription, SMN sends a confirmation message to the subscription endpoint. The message contains a link for confirming the subscription. The subscription confirmation link is valid within 48 hours. Confirm the subscription on your mobile phone, mailbox, or other endpoints in time.

Step 3. Publish a Message

1. In the navigation pane, choose **Topic Management > Topics**.
The **Topics** page is displayed.
2. Locate **Mytopic** and click **Publish Message** in the **Operation** column.
3. On the **Publish Message** page, configure the following parameters:
 - **Topic Name:** The topic name is displayed by default.
 - **Message Format:** **JSON**
 - **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."  
}
```

 NOTE

For more details, see [Publishing a JSON Message](#).

Figure 3-7 Publishing a JSON Message

Publish Message ✕

Basic Information

Topic Name

Subject

★ Message Format Text JSON Template

★ Message

```
{
  "default": "This is a default message.",
  "sms": "This is a default message.",
  "email": "This is a default message.",
  "http": "This is a default message.",
  "https": "This is a default message.",
  "functionstage": "This is a default message."
}
```

Select JSON to send different messages to endpoints of different protocols.
There are 255 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
<input type="text" value="--Select--"/>	<input type="text"/>	<input type="text"/>

[+ Add more attributes.](#)

4. Click **OK** to deliver your message to all subscription endpoints.
For details about messages, see [Messages of Different Protocols](#).

Step 4. Receive the Message

Subscription endpoints of different protocols receive different messages.

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

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 the template and set values only for variables without having to edit the message content repeatedly.

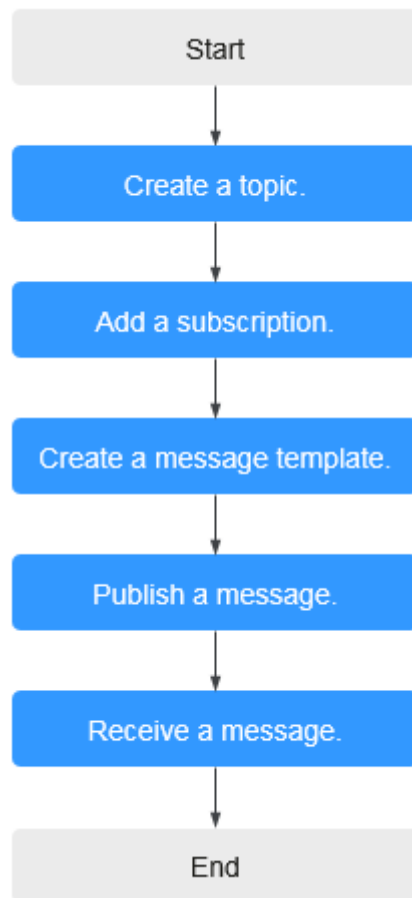
For example, your organization holds expositions regularly, and you need to notify people of the time. Except for the time, most part of the message remains unchanged. You can perform the following operations to send notifications:

- Create a topic **Mytopic**.
- Add SMS and email subscriptions to the topic.
- Publish message "**The Arts and Crafts Exposition will be held from {startdate} through {enddate}. We sincerely invite you to join us.**"
{startdate} indicates the date when the exposition is started. *{enddate}* indicates the date when the exposition is ended.

Operation Process

[Figure 4-1](#) shows the process to publish a template message.

Figure 4-1 Process of publishing a template message



Step 1. Create a Topic


1. Log in to the management console.
2. Click  on the upper left to select the desired region and project.
3. Under **Management & Governance**, select **Simple Message Notification**.
The SMN console is displayed.
4. In the navigation pane, choose **Topic Management > Topics**.
5. In the upper right corner, click **Create Topic**.

Figure 4-2 Create Topic

Create Topic ✕

* Topic Name
The name cannot be changed after the topic is created.

Display Name
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 🔍 Create Enterprise Project
Enterprise Project Management Service (EPS) allows you to manage cloud resources and user groups by enterprise project.

CTS Log

Tag
It is recommended that you use TMS's predefined tag function to add the same tag to different cloud resources. [View predefined tags](#) 🔍
To add a tag, enter a tag key and a tag value below.

Tags you can still add: 20

6. Set **Topic Name** to **Mytopic**.

NOTE

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

7. 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.

8. Click the name of the topic to view its details, including the topic URN, display name, and subscriptions.

Figure 4-3 Topic details and subscriptions

Topic Details

Topic Name my* URN [urn:tm:smn:cn-sg:mytopic](#)

ID 8610250644435059c70119987c3e Display Name -

Created Apr 22, 2022 11:03:11 GMT+08:00 Enterprise Project default

Subscriptions Tags Logs

Subscription URN	Protocol	Endpoint	Status	Request Header	Description	Operation
8610250644435059c70119987c3e	SMS	tm:smn:cn-sg:mytopic	Unconfirmed	-	-	Request Confirmation Edit Delete

Step 2. Add a Subscription

1. In the navigation pane, choose **Topic Management > Subscriptions**.
2. On the **Subscriptions** page, click **Add Subscription**.
The **Add Subscription** dialog box is displayed.

Figure 4-4 Add Subscription

Add Subscription ×

Basic Information

* Topic Name + Add Topic

* 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"/>	<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

3. Add an SMS subscription to a topic.
 - a. Click **+** beside the **Topic Name** box to select **Mytopic**.
 - b. Select **SMS** from the **Protocol** drop-down list.
 - c. In the **Endpoint** box, enter the subscription endpoint, for example, **+8618512345678**.
Enter one endpoint on a separate line.

Figure 4-5 Add Subscription (SMS)

Add Subscription ×

Basic Information

* Topic Name Select Topic

* 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="+8618512345678"/>	<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

- d. Click **OK**.
4. Add an email subscription to a topic.
- a. Click **+** beside the **Topic Name** box to select **Mytopic**.
 - b. Select **Email** from the **Protocol** drop-down list.
 - c. In the **Endpoint** box, enter the subscription endpoint.
Enter one endpoint on a separate line.

Figure 4-6 Add Subscription (Email)

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="username@example.com"/>	<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.

d. Click **OK**.

After a subscription is added, the subscription endpoint receives a confirmation message. Confirm the subscription so that the endpoint can receive messages published to the topic.

 NOTE

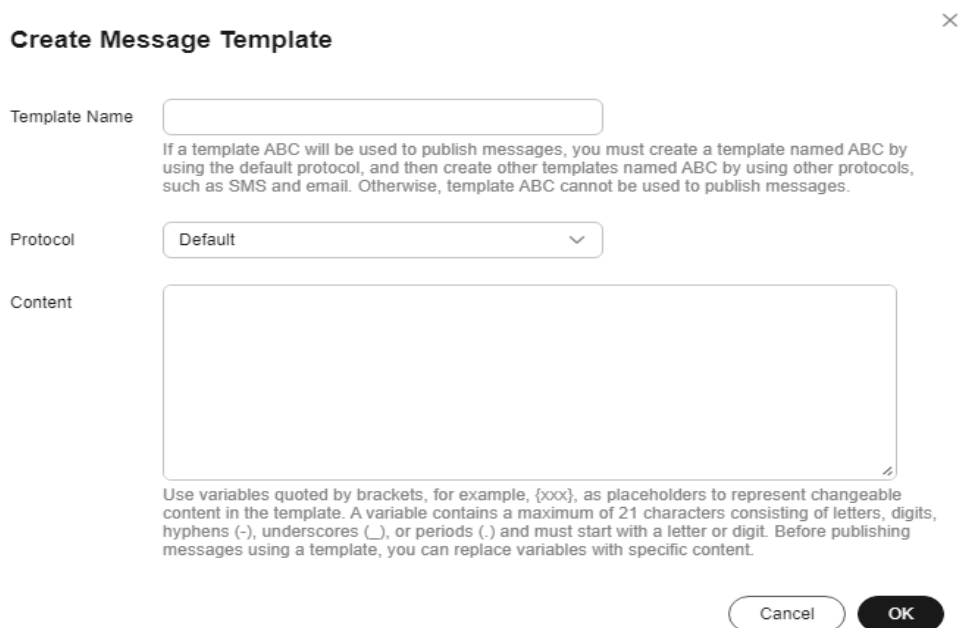
- For more details, see [Adding a Subscription](#).
- To prevent malicious users from attacking subscription endpoints, SMN limits the number of confirmation messages that can be sent to an endpoint within a specified period of time. For details, see section "Traffic Control on Subscription Confirmation" in *Simple Message Notification User Guide*.
- SMN does not check whether subscription endpoints exist when you add subscriptions. However, subscribers will not receive notification messages until they confirm their subscriptions.
- After you add a subscription, SMN sends a confirmation message to the subscription endpoint. The message contains a link for confirming the subscription. The subscription confirmation link is valid within 48 hours. Confirm the subscription on your mobile phone, mailbox, or other endpoints in time.

Step 3. Create a Message Template

1. In the navigation pane, choose **Topic Management > Message Templates**.
2. In the upper right corner, click **Create Message Template**.

The **Create Message Template** dialog box is displayed.

Figure 4-7 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

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.

3. In the **Create Message Template** box, set the following parameters:
 - **Template Name:** tem_001
 - **Protocol:** Default
 - **Content:** The Arts and Crafts Exposition will be held from {startdate} through {enddate}. We sincerely invite you to join us.
- When you publish the messages, you need to replace {startdate} with the exposition start time and {enddate} with the end time.

Figure 4-8 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.

4. Click **OK**.
The template you created is displayed in the template list.

Step 4. Publish a Message

1. In the navigation pane, choose **Topic Management > Topics**.
The **Topics** page is displayed.
2. Locate **Mytopic** and click **Publish Message** in the **Operation** column.
3. On the **Publish Message** page, configure the following parameters:
 - **Topic Name:** The topic name is displayed by default.
 - **Message Format: Template**
 - **Message:**
 - i. Click **Generate Template Message**.
 - ii. Select **tem_01** from the **Template Name** drop-down list.
 - iii. On the **Variables** tab, specify **startdate** and **enddate**.
For example, set **startdate** to **02/01/2019** and **enddate** to **02/10/2019**.

Figure 4-9 Generate Template Message

Generate Template Message ×

* Template Name 🔍 Create Message Template

Provide values for the parameters in the template, and then switch to the Preview tab to see how the message will look.

Variables Preview

Parameter	Value	Protocol
startdate	<input type="text" value="02/01/2019"/>	Default
enddate	<input type="text" value="02/10/2019"/>	Default

NOTE

For more details, see [Publishing a Template Message](#).

- iv. Click **Preview** to preview the message.

In this example, the message generated is **"The Arts and Crafts Exposition will be held from 02/01/2019 through 02/10/2019. We sincerely invite you to join us."**

Figure 4-10 Previewing the template message

Generate Template Message ×

* Template Name 🔍 Create Message Template

Provide values for the parameters in the template, and then switch to the Preview tab to see how the message will look.

Variables **Preview**

SMS Email HTTP HTTPS FunctionGraph (function)

The Arts and Crafts Exposition will be held from February 10 through February 21. We sincerely invite you to join us.

- v. Click **OK**.

The generated message contains the template name and variables.

Figure 4-11 Publishing a Template Message

4. Click **OK** to deliver your message to all subscription endpoints.
For details about messages, see [Messages of Different Protocols](#).

Step 5. Receive the Message

Subscription endpoints of different protocols receive different messages.

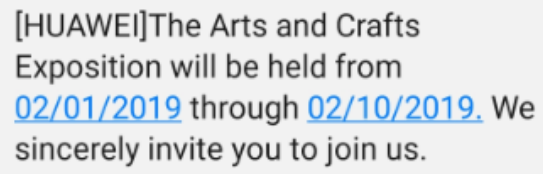
- Email
Email messages contain the message subject, content, and a link to unsubscribe.

Figure 4-12 Email message

The Arts and Crafts Exposition will be held from 02/01/2019 through 02/10/2019. We sincerely invite you to join us.
If you wish to stop receiving notifications from this topic, please click or visit the link below to unsubscribe:
https://console-intl.huaweicloud.com/smn/unsubscribe.html?subscription_url=urn:smn:ap-southeast-1:9a38caf2e0bb471d9ed8340ce24177ea:Mytopic:b51eb25cdd5b478eb50f75304939243

- SMS
SMS messages only contain the message content.

Figure 4-13 SMS message

A screenshot of an SMS message displayed in a light gray box. The message text is: "[HUAWEI]The Arts and Crafts Exposition will be held from [02/01/2019](#) through [02/10/2019](#). We sincerely invite you to join us." The dates are highlighted in blue with underlines, indicating they are hyperlinks.

[HUAWEI]The Arts and Crafts
Exposition will be held from
[02/01/2019](#) through [02/10/2019](#). We
sincerely invite you to join us.