

Simple Notification Services (SNS)

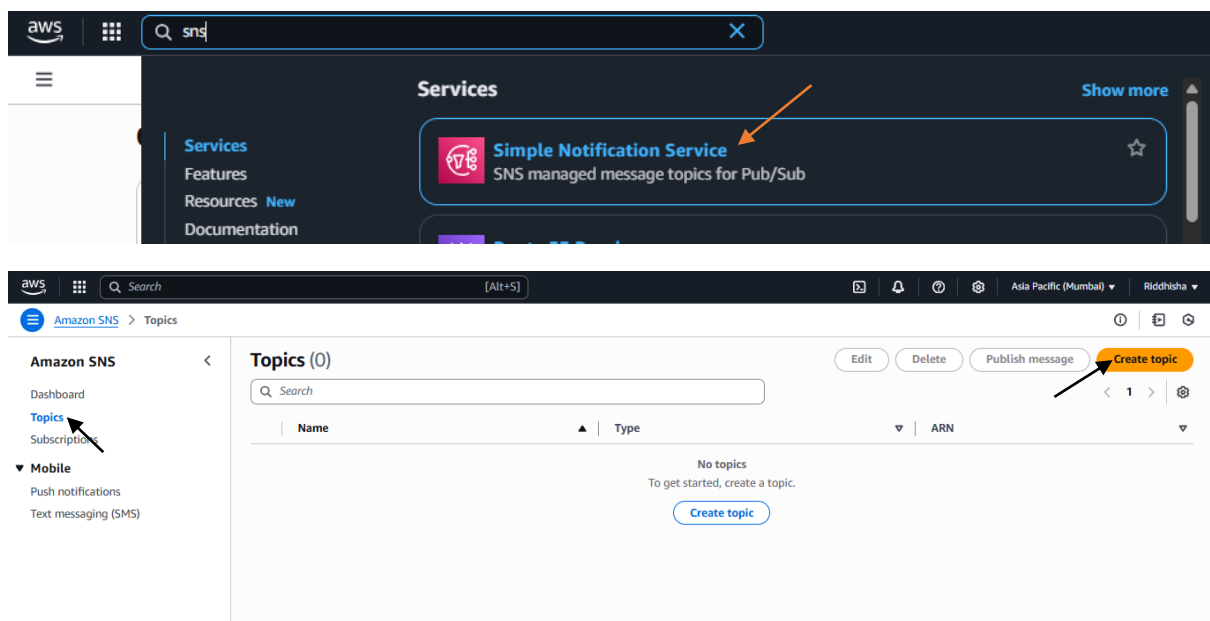
Introduction:

- "Amazon SNS" (Simple Notification Service) is a fully managed service that lets you send messages or alerts to many users or systems at the same time.
- It uses a "publish-subscribe" model, where messages are sent to a "topic", and all the "subscribers" of that topic receive the message.
- You can send messages through "SMS", "Email", "Mobile Push Notifications", or even to other AWS services like "SQS" or "Lambda".
- "Amazon SNS" is fast, reliable, and can easily scale, which makes it useful for sending alerts, system updates, or automatic notifications in AWS-based applications.

Step by Step Instructions:

Step1:

- Go to the search bar on AWS Management Console and search "SNS".
- On the left side menu, click on "Topics".
- Now click on "Create topic".



Step 2:

- In "Type", choose "Standard" if you want to send messages like email or SMS.

aws Search [Alt+S] Asia Pacific (Mumbai) Riddhisha

Amazon SNS > Topics > Create topic

Create topic

Details

Type [Info](#)
Topic type cannot be modified after topic is created

☐ FIFO (first-in, first-out)

- Strictly-preserved message ordering
- Exactly-once message delivery
- Subscription protocols: SQS

☒ Standard

- Best-effort message ordering
- At-least once message delivery
- Subscription protocols: SQS, Lambda, Data Firehose, HTTP, SMS, email, mobile application endpoints

Name

topic1

Maximum 256 characters. Can include alphanumeric characters, hyphens (-) and underscores (_).

Display name - optional [Info](#)
To use this topic with SMS subscriptions, enter a display name. Only the first 10 characters are displayed in an SMS message.

My Topic

Maximum 100 characters.

- Write the “Name” of topic.
- Write “Display name” also if you want. It is optional.

Name

topic1

Maximum 256 characters. Can include alphanumeric characters, hyphens (-) and underscores (_).

- Leave rest other options as it is.
- Click on “Create topic”.

► **Tags - optional**

A tag is a metadata label that you can assign to an Amazon SNS topic. Each tag consists of a key and an optional value. You can use tags to search and filter your topics and track your costs. [Learn more](#)

► **Active tracing - optional** [Info](#)

Use AWS X-Ray active tracing for this topic to view its traces and service map in Amazon CloudWatch. Additional costs apply.

[Cancel](#) [Create topic](#)

- Topic is created.

✔ **Topic topic1 created successfully.** [Publish message](#) ✕
You can create subscriptions and send messages to them from this topic.

topic1 [Edit](#) [Delete](#) [Publish message](#)

Details

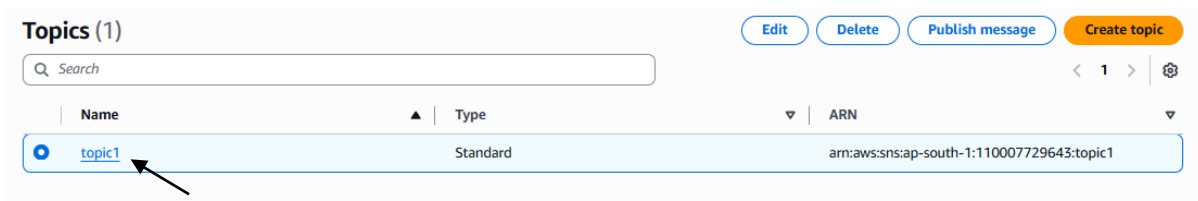
Name topic1	Display name -
ARN arn:aws:sns:ap-south-1:110007729643:topic1	Topic owner 110007729643
Type Standard	

Create subscription for “Email”:

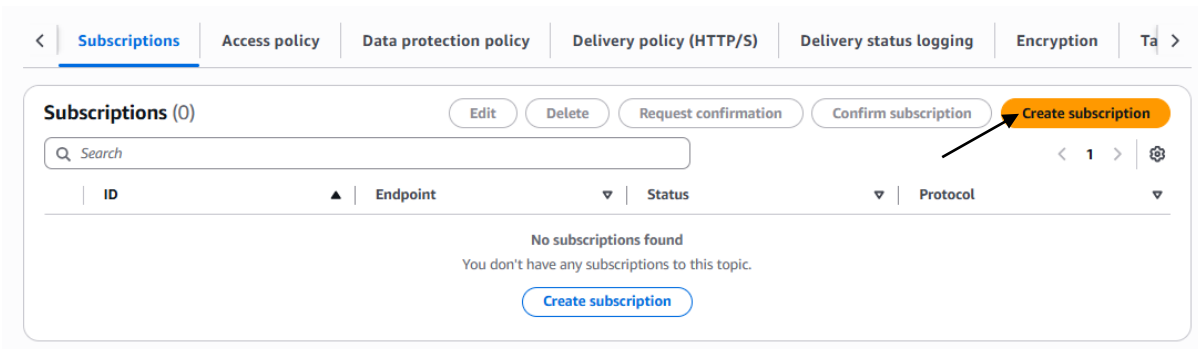
Step 3:

- Now, we have to create a “Subscription” for Email.

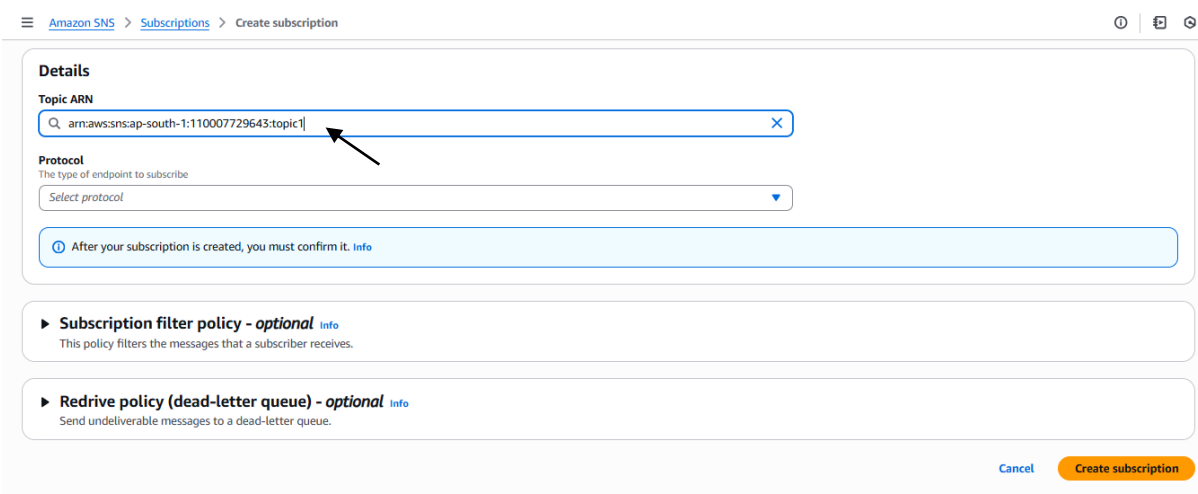
- Select the topic you just created and click on the topic name.



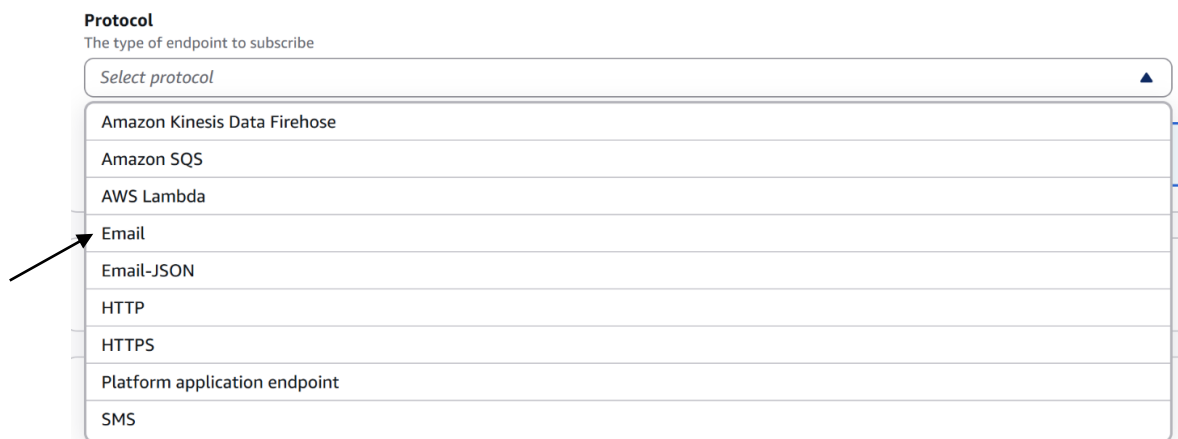
- Scroll down and click on “Create subscription”.



- Select the “Topic ARN”.



- Click on “Protocol” and select “Email”.



- In “Endpoint”, write an email address where you want to send the message.
- Click on “Create Subscription”.

Endpoint
An email address that can receive notifications from Amazon SNS.

① After your subscription is created, you must confirm it. [Info](#)

► **Subscription filter policy - optional** [Info](#)
This policy filters the messages that a subscriber receives.

► **Redrive policy (dead-letter queue) - optional** [Info](#)
Send undeliverable messages to a dead-letter queue.

[Cancel](#) [Create subscription](#)

- Subscription is created.

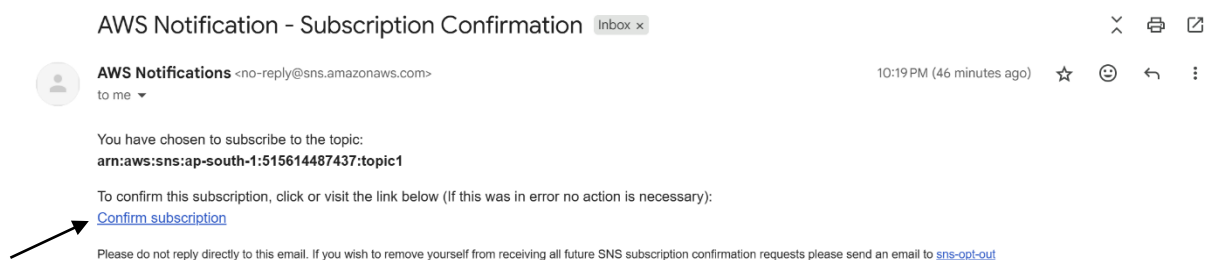
✓ **Subscription to topic1 created successfully.**
The ARN of the subscription is `arn:aws:sns:ap-south-1:110007729643:topic1:118fd65c-7d22-4435-b42e-2ba281da0229`.

Subscription: 118fd65c-7d22-4435-b42e-2ba281da0229 [Edit](#) [Delete](#)

Details	
ARN <code>arn:aws:sns:ap-south-1:110007729643:topic1:118fd65c-7d22-4435-b42e-2ba281da0229</code>	Status ⌚ Pending confirmation
Endpoint riddhisha0645@gmail.com	Protocol EMAIL
Topic topic1	
Subscription Principal <code>arn:aws:iam::110007729643:root</code>	

Step 4:

- Check the email that you entered and click on “Confirm subscription”.



- Subscription confirmed.

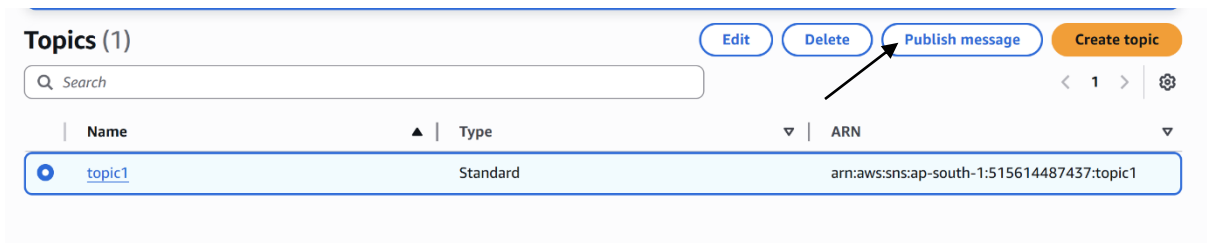
Subscriptions (3) [Edit](#) [Delete](#) [Request confirmation](#) [Confirm subscription](#) [Create subscription](#)

🔍 Search

ID	Endpoint	Status	Protocol	Topic
d8e309af-e74d-4304-abd1...	riddhisha0645@gmail.com	✓ Confirmed	EMAIL	topic1

Step 5:

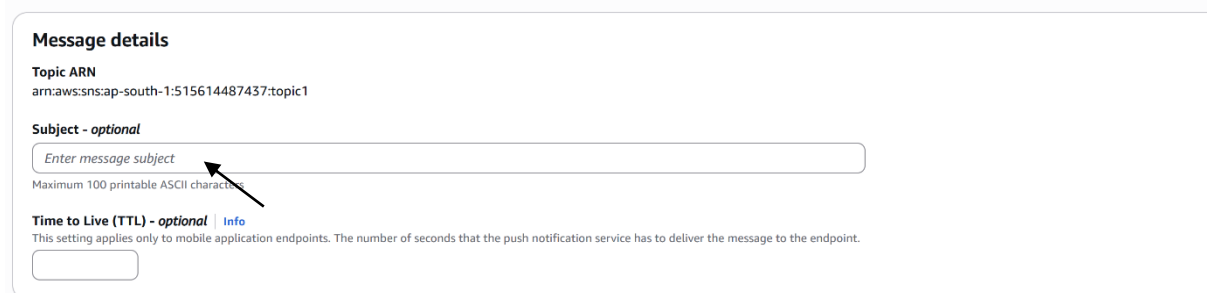
- Select the topic you have created and click on “Publish message”.



The screenshot shows the AWS SNS console 'Topics (1)' page. At the top, there are buttons for 'Edit', 'Delete', 'Publish message' (highlighted with an arrow), and 'Create topic'. Below these is a search bar and a table with columns 'Name', 'Type', and 'ARN'. The table contains one entry: 'topic1' with type 'Standard' and ARN 'arn:aws:sns:ap-south-1:515614487437:topic1'.

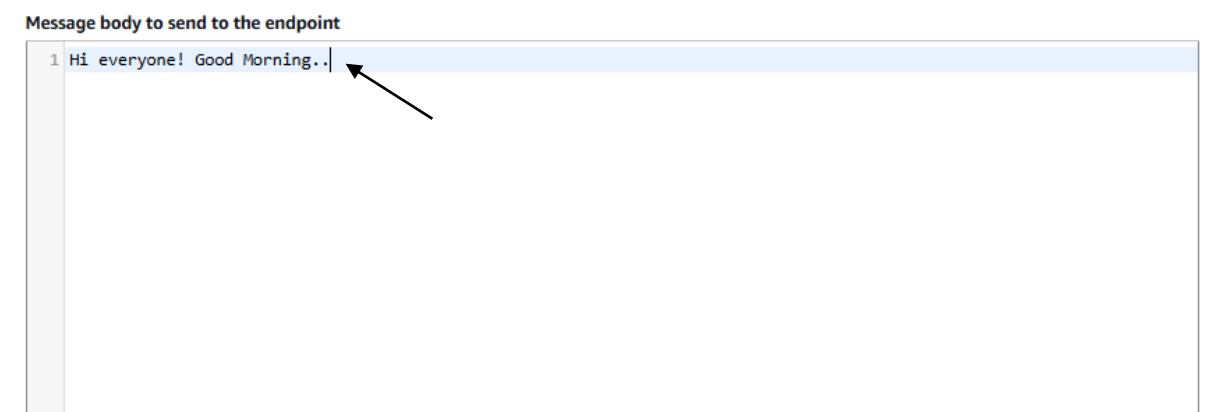
- “Subject” is optional .

Publish message to topic



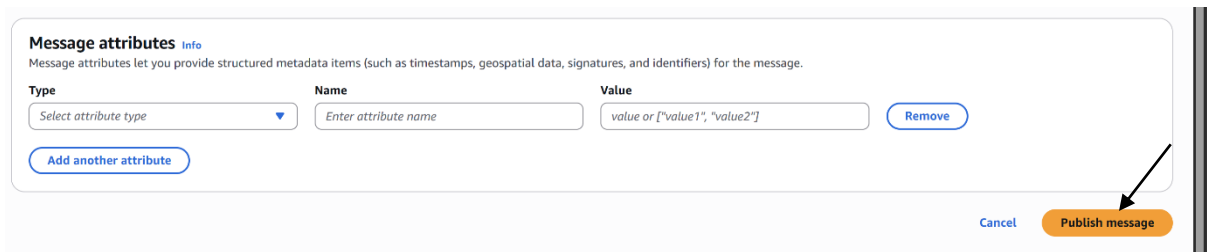
The screenshot shows the 'Publish message to topic' form. Under 'Message details', the 'Topic ARN' is 'arn:aws:sns:ap-south-1:515614487437:topic1'. The 'Subject - optional' field is highlighted with an arrow and contains the placeholder text 'Enter message subject'. Below it, the 'Time to Live (TTL) - optional' field is shown with a note: 'This setting applies only to mobile application endpoints. The number of seconds that the push notification service has to deliver the message to the endpoint.'

- In “Message body to send to the endpoint”, write message.



The screenshot shows the 'Message body to send to the endpoint' text area. The text 'Hi everyone! Good Morning..|' is entered and highlighted with an arrow.

- Click on “Publish message”.



The screenshot shows the 'Message attributes' section. It includes a table with columns 'Type', 'Name', and 'Value'. Below the table is an 'Add another attribute' button. At the bottom right, the 'Publish message' button is highlighted with an arrow.

- Message is published.

Message published to topic topic1 successfully.
Message "ID": 21fb7e24-0d9b-5791-a105-1ed0c69f53ea
Request "ID": be6c3495-01a0-5151-85aa-5461caa4e52a

Publish another message

topic1

Edit

Delete

Publish message

Details

Name
topic1

Display name
-

ARN

arn:aws:sns:ap-south-1:110007729643:topic1

Topic owner

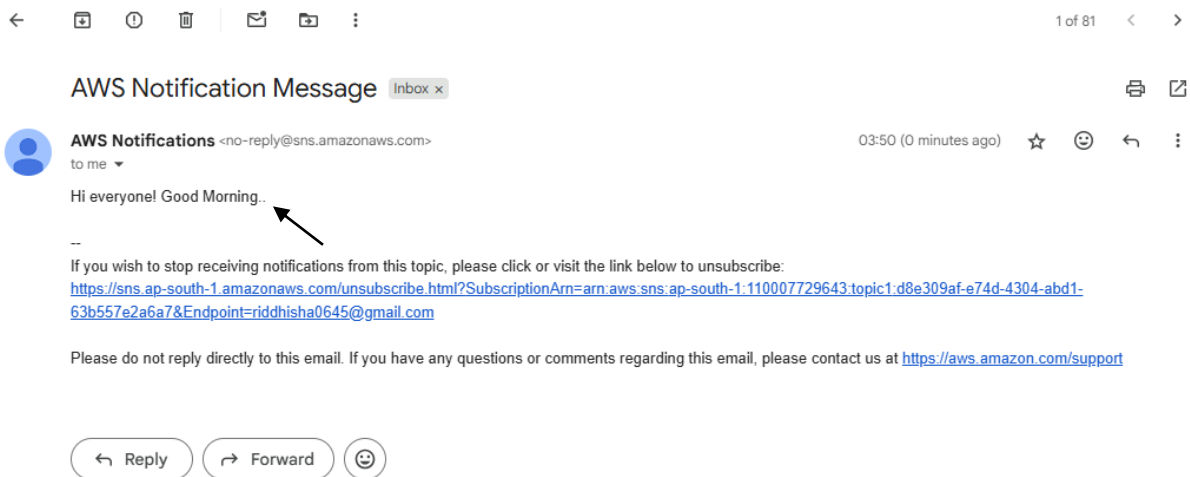
110007729643

Type

Standard

Step 6:

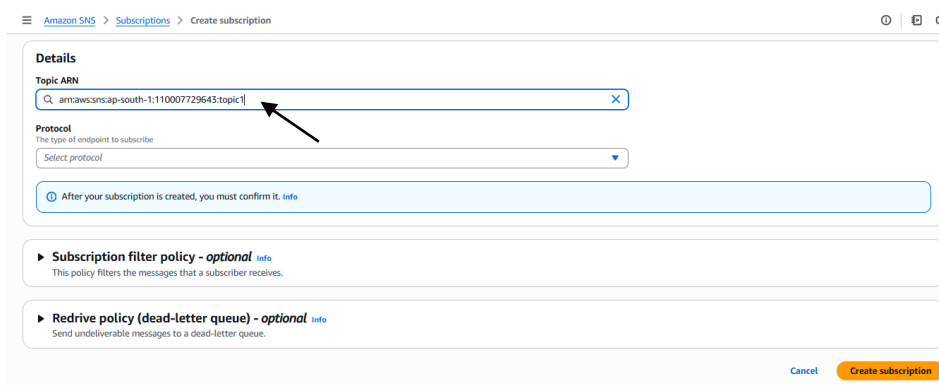
- Go to the mail and check whether the mail is received or not.



Create subscription for “SMS”:

Step 7:

- Select the topic you have created and click on “Create subscription” as you did before.
- Select the “Topic ARN”.



- In “Protocol”, select “SMS”.

Protocol

The type of endpoint to subscribe

Select protocol▲

Amazon Kinesis Data Firehose

Amazon SQS

AWS Lambda

Email

Email-JSON

HTTP

HTTPS

Platform application endpoint

SMS

- Now click on “Add phone number” to add a number where you want to send the message.

Protocol

The type of endpoint to subscribe

SMS▼

Endpoint

A mobile number that can receive notifications from Amazon SNS.

Q

+1 999 999 9999

Sandbox destination phone numbers

When in the sandbox, you can only deliver SMS to the sandbox destination phone numbers you have verified. [Learn more](#)

Add phone number

- Enter the “Phone number”.

Phone number

 +91 70071-77808

The phone number can have up to 20 digits, with a leading '+' and no spaces or hyphens (-).

- Select “Verification message language”.

Verification message language

English (United States)▲

English (United States)✓

English (United Kingdom)

German (Germany)

Spanish (Latin America)

Spanish (Spain)

French (Canada)

French (France)

Italian (Italy)

Japanese (Japan)

Korean (Korea)

Portuguese (Brazil)

- Click on “Add phone number”.

Cancel Add phone number

- Enter the “Verification code” received from AWS.
- Click on “Verify phone number”.

Details

Phone number

+917007177808

The phone number can have up to 20 digits, with a leading “+” and no spaces or hyphens (-).

Verification code

123321

Enter a string of 5-8 digits.

Cancel Resend verification code Verify phone number

Step 8:

- Now click on “Create subscription”.

Sandbox destination phone numbers

When in the sandbox, you can only deliver SMS to the sandbox destination phone numbers you have verified. [Learn more](#)

Add phone number

Subscription filter policy - optional [Info](#)

This policy filters the messages that a subscriber receives.

Redrive policy (dead-letter queue) - optional [Info](#)

Send undeliverable messages to a dead-letter queue.

Cancel Create subscription

- Subscription is created.

Subscription to topic1 created successfully.

The ARN of the subscription is arn:aws:sns:ap-south-1:515614487437:topic1:4241e362-08c5-4578-8d9a-fb04a345a2e4.

Subscription: 4241e362-08c5-4578-8d9a-fb04a345a2e4 Edit Delete

Details

ARN
arn:aws:sns:ap-south-1:515614487437:topic1:4241e362-08c5-4578-8d9a-fb04a345a2e4

Endpoint
+917007177808

Topic
[topic1](#)

Subscription Principal
arn:aws:iam::515614487437:root

Status
Confirmed

Protocol
SMS

Subscriptions Access policy Data protection policy Delivery policy (HTTP/S) Delivery status logging Encryption

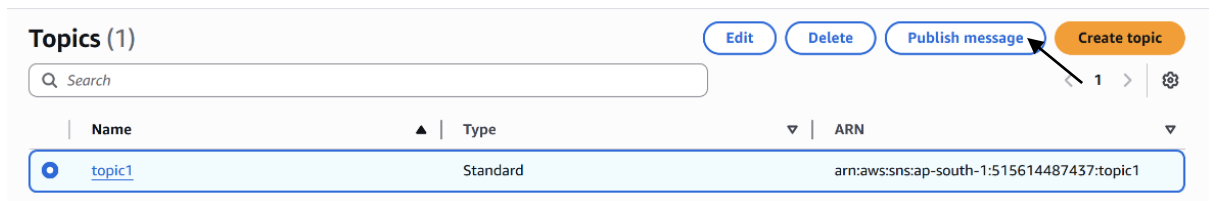
Subscriptions (1) Edit Delete Request confirmation Confirm subscription Create subscription

Search

ID	Endpoint	Status	Protocol
4241e362-08c5-4578-8d9a-fb...	+917007177808	Confirmed	SMS

Step 9:

- Select the “topic” and click on “Publish message”.



Topics (1)

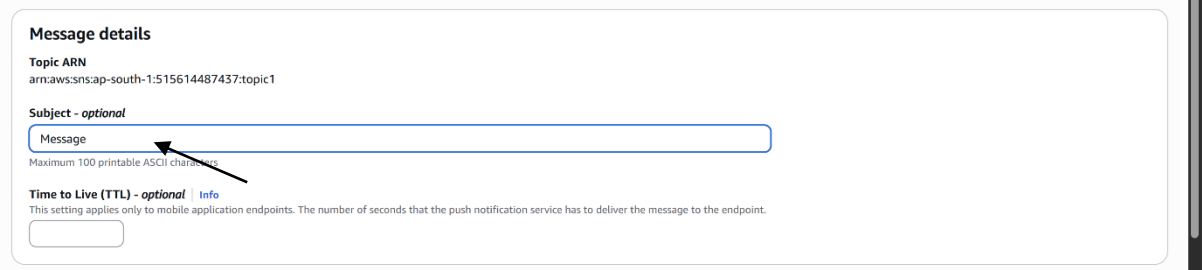
Search

1

Name	Type	ARN
topic1	Standard	arn:aws:sns:ap-south-1:515614487437:topic1

- “Subject” is optional.

Publish message to topic



Message details

Topic ARN
arn:aws:sns:ap-south-1:515614487437:topic1

Subject - optional

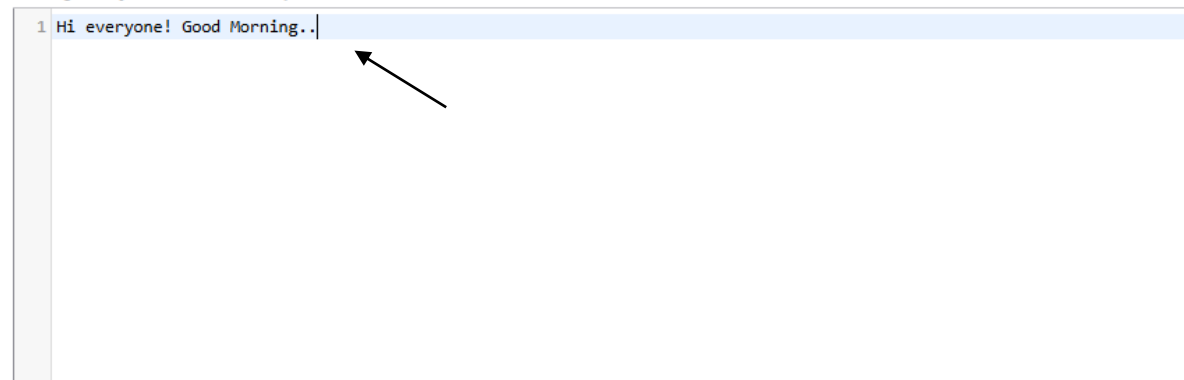
Message

Maximum 100 printable ASCII characters

Time to Live (TTL) - optional [Info](#)
This setting applies only to mobile application endpoints. The number of seconds that the push notification service has to deliver the message to the endpoint.

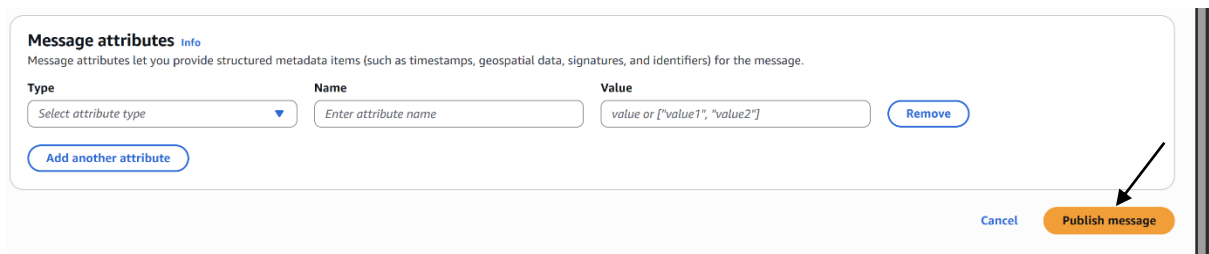
- Write your message in “Message body to send to the endpoint”.

Message body to send to the endpoint



```
1 Hi everyone! Good Morning..
```

- Click on “Publish message”.



Message attributes [Info](#)

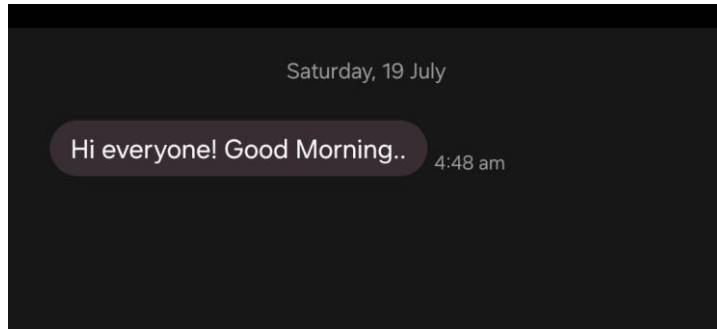
Message attributes let you provide structured metadata items (such as timestamps, geospatial data, signatures, and identifiers) for the message.

Type	Name	Value
Select attribute type	Enter attribute name	value or ["value1", "value2"]

[Add another attribute](#)

[Cancel](#) [Publish message](#)

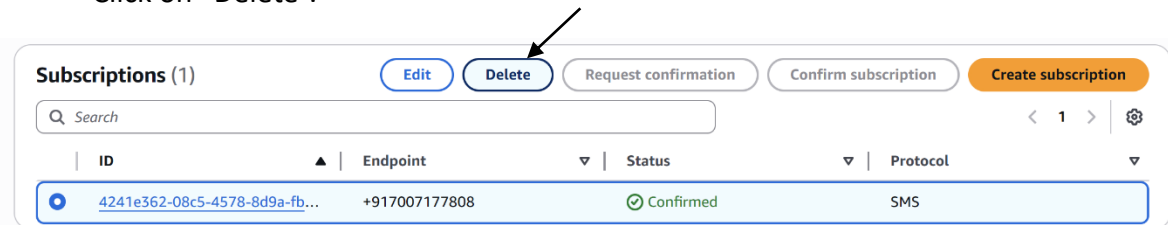
- Message is sent to the entered phone number.
- Message is received also.



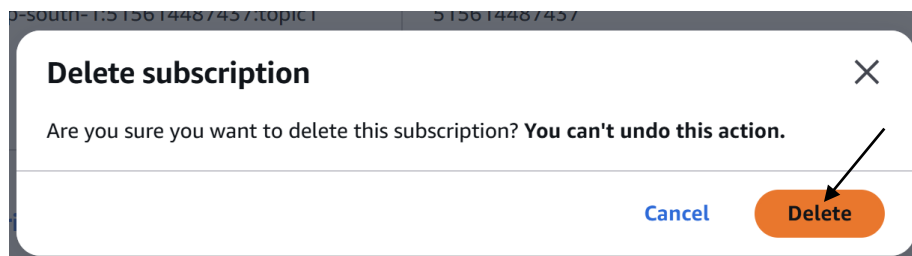
Delete a Subscription:

Step 10:

- Go to “Subscriptions” and select the subscription.
- Click on “Delete”.



- Click on “Delete” button.



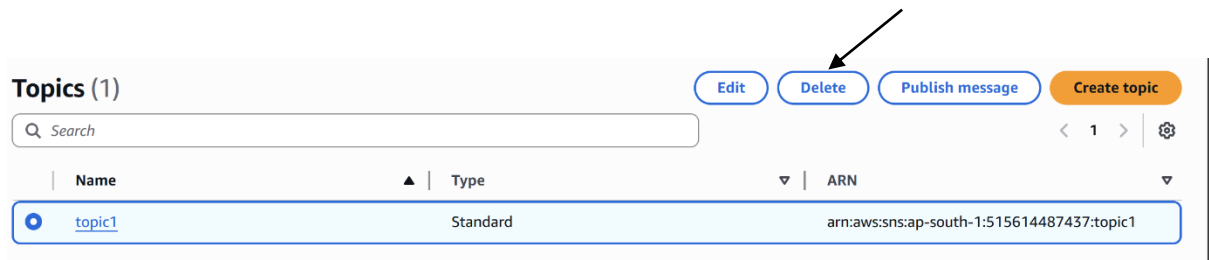
- Subscription deleted successfully.



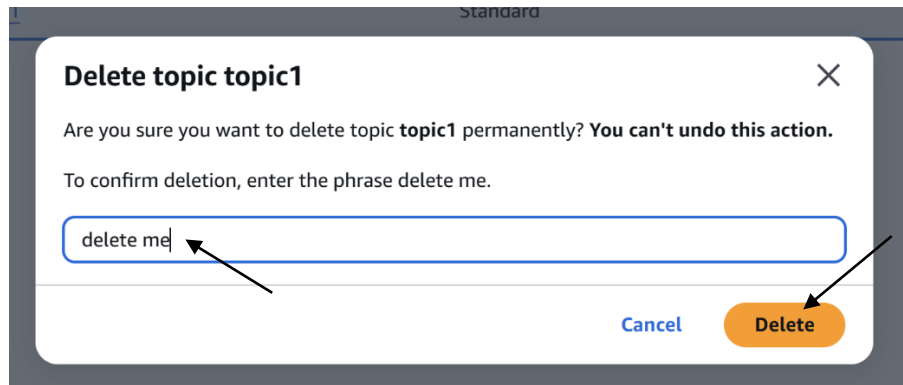
Delete a Topic:

Step 11:

- Select the topic and click on “Delete”.



- Write “delete me” to confirm and click on “Delete” button.



- The topic is deleted successfully.

