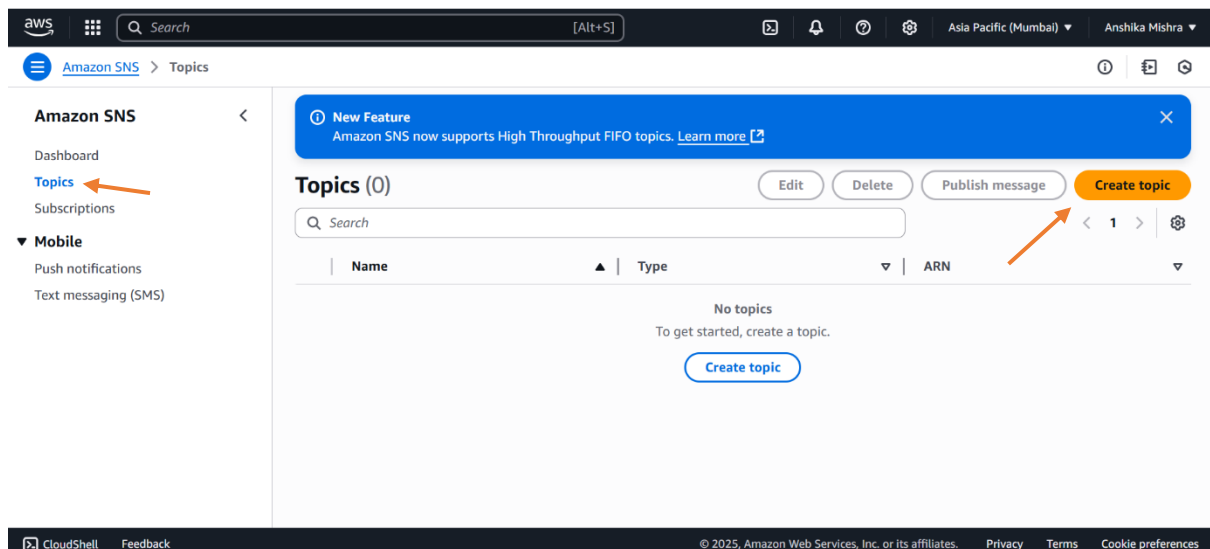# Simple Notification Service(SNS)

Amazon Simple Notification Service (Amazon SNS) is a fully managed service that provides message delivery from publishers (producers) to subscribers (consumers). Publishers communicate asynchronously with subscribers by sending messages to a *topic*, which is a logical access point and communication channel.
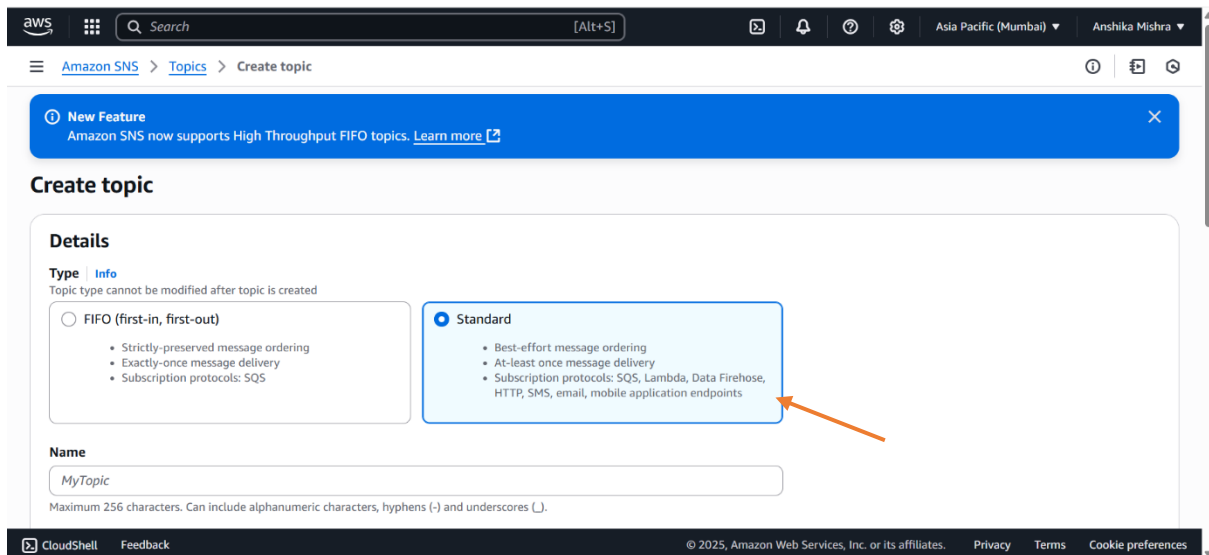
How to create Topic:-

Step1:-

- Goto Search bar. Search SNS. Click on SNS.
- Click on "Topic"(left side).
- Click on "create topic".

Step2:-

- In "Type" , Select "Standard".(for mail, sms etc).

- Write the "Name" of topic.

Name

topic1

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

- Click on "Create topic".

▶ **Data protection policy - *optional*** Info
This policy defines which sensitive data to monitor and to prevent from being exchanged via your topic.

▶ **Delivery policy (HTTP/S) - *optional*** Info
The policy defines how Amazon SNS retries failed deliveries to HTTP/S endpoints. To modify the default settings, expand this section.
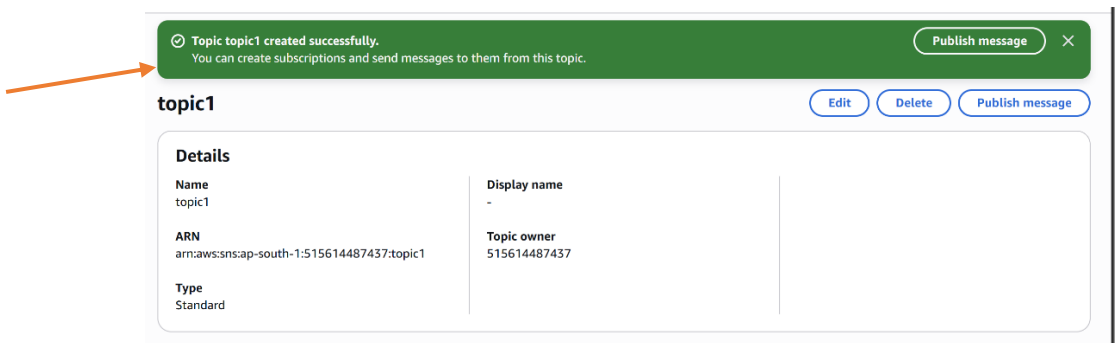
▶ **Delivery status logging - *optional*** Info
These settings configure the logging of message delivery status to CloudWatch Logs.

▶ **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

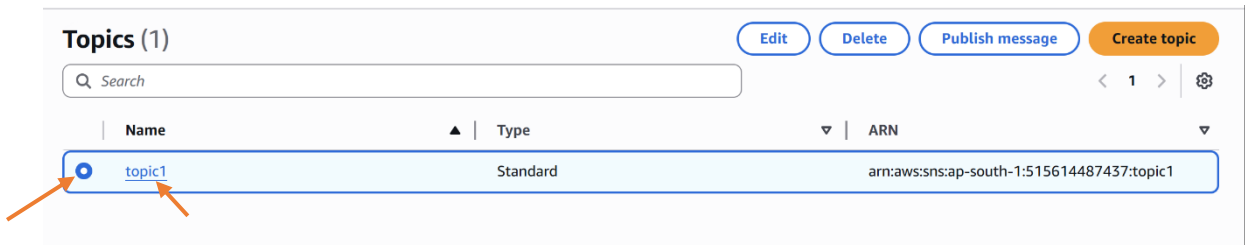- Topic is created.

⊘ **Topic topic1 created successfully.**
You can create subscriptions and send messages to them from this topic.   Publish message   ✕

topic1   Edit   Delete   Publish message

Details

Name   **Display name**
topic1   -

ARN   **Topic owner**
arn:aws:sns:ap-south-1:515614487437:topic1   515614487437
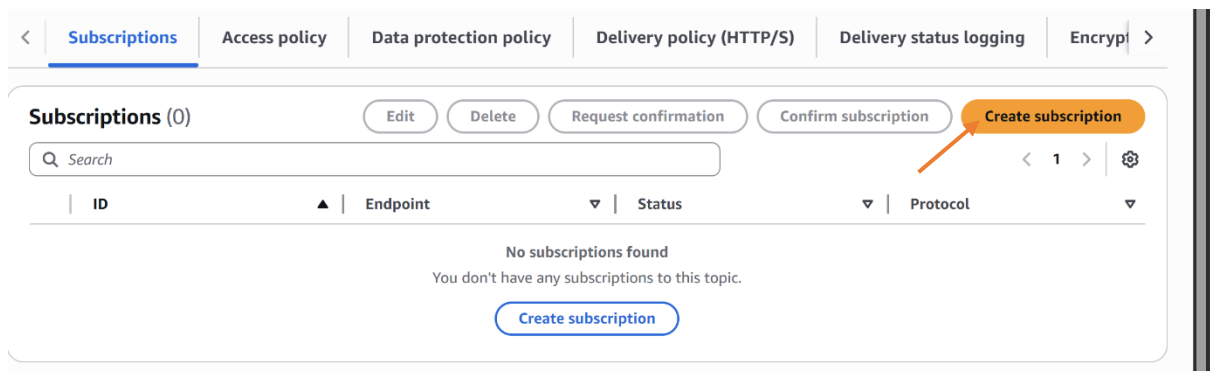
Type
Standard

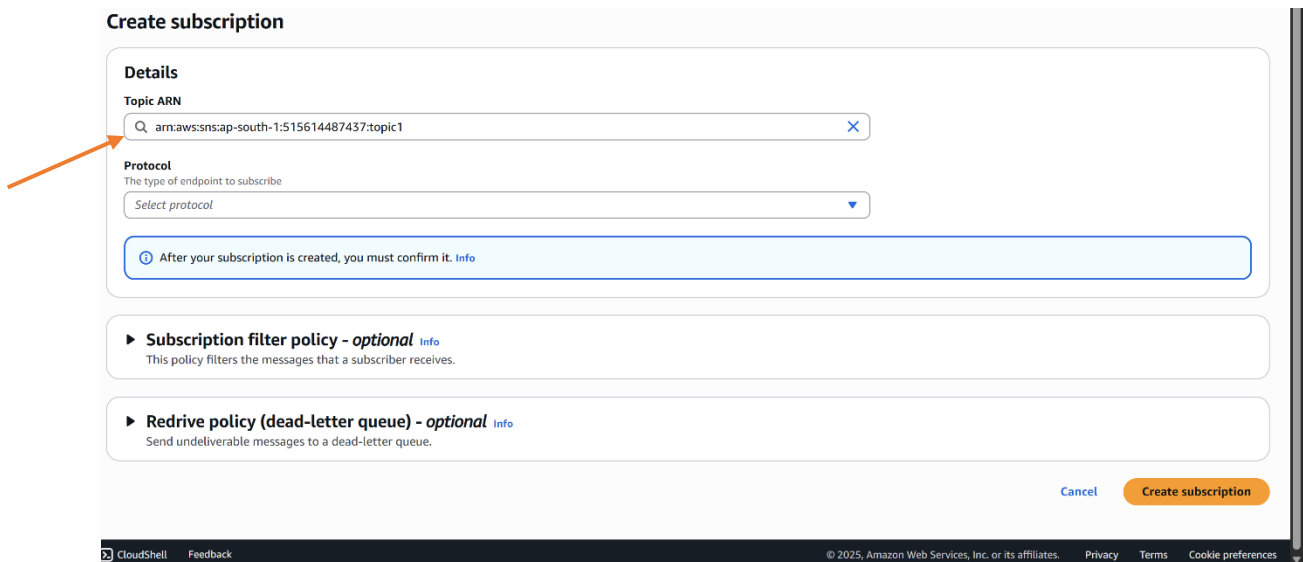# How to Create subscription "Email" and publish message:-

Step3:-

- Select the "Topic" and click on the topic name. Ex:- topic1.

- Click on the "Create subscription".

- Select the "Topic ARN".

Step4:-

- Click on "Protocol" and select "Email".

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	

- Click on "Create Subscription".

▶ **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:topic1:79375a99-8c72-49ef-b17e-9964d7e80a03.   ✕

Subscription: 79375a99-8c72-49ef-b17e-9964d7e80a03   Edit   Delete

Details

ARN
arn:aws:sns:ap-south-1:515614487437:topic1:79375a99-8c72-49ef-b17e-9964d7e80a03

Endpoint
sachintri.7890@gmail.com

Topic
topic1

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

Status
🕓 Pending confirmation

Protocol
EMAIL

Step5:-

- Goto to the Mail and click on "Confirm subscription".

- Subscription confirmed.

- Select the topic and click on "Publish message".

- "Subject" is optional .

Publish message to topic

Message details

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

Subject - *optional*

Enter message subject

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.

- In "Message body to send to the endpoint" write message.

- Click on "Publish message".

- Message is Published.

Step6:-

- Goto the mail and check mail is recieved.

How to Create subscription "SMS" and publish message:-

Step7:-

- Goto the subscription.
- Select "Standard".

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

- 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

- Click on "Add Phone Number".

Protocol
The type of endpoint to subscribe

SMS	▼

Endpoint
A mobile number that can receive notifications from Amazon SNS.

🔍 +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"

Destination details

Phone number

+91 70071-77808

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

Verification message language

English (United States) ▼

The language the verification message will be sent in.

Cancel   **Add phone number**

- Enter the "verification code" received from the 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**

Step8:-

- Click on "Create subscription".

Protocol
The type of endpoint to subscribe

```
SMS                                                          ▼
```

Endpoint
A mobile number that can receive notifications from Amazon SNS.

```
🔍  +917007177808                                             ✕
```

> ⓘ **Sandbox destination phone numbers**   [Add phone number]
> When in the sandbox, you can only deliver SMS to the sandbox destination phone numbers you
> have verified. Learn more 🔗

▶ **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	**Status**
arn:aws:sns:ap-south-1:515614487437:topic1:4241e362-08c5-8d9a-fb04a345a2e4	⊘ Confirmed
	Protocol
Endpoint	SMS
+917007177808	
Topic	
topic1	
Subscription Principal	
arn:aws:iam::515614487437:root	

```
<  Subscriptions  |  Access policy  |  Data protection policy  |  Delivery policy (HTTP/S)  |  Delivery status logging  |  Encryptio  >
```

Subscriptions (1)   [Edit] [Delete] [Request confirmation] [Confirm subscription] [**Create subscription**]

```
🔍  Search                                                              <  1  >   ⚙
```

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

Step9:-

- Select the "topic" and click on "publish message".

Topics (1)   [Edit] [Delete] [Publish message] [**Create topic**]

```
🔍  Search                                                              <  1  >   ⚙
```

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

- "subject" is optional.

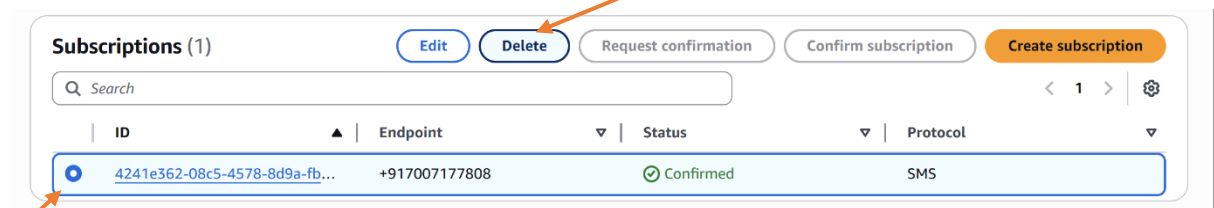- Write the message in "message body to send to the endpoint".

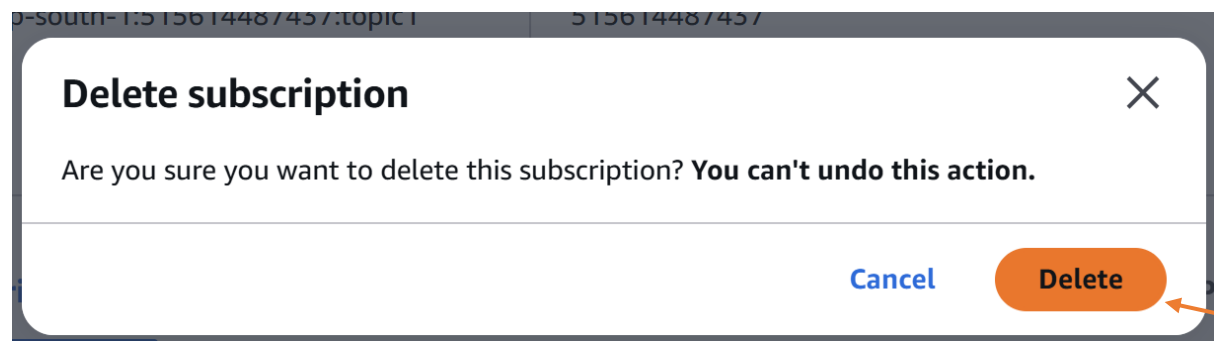- Click on "Publish message".

- Message is received.

How to create Subscription:-

Step10:-

- Select subscription and click on "delete".
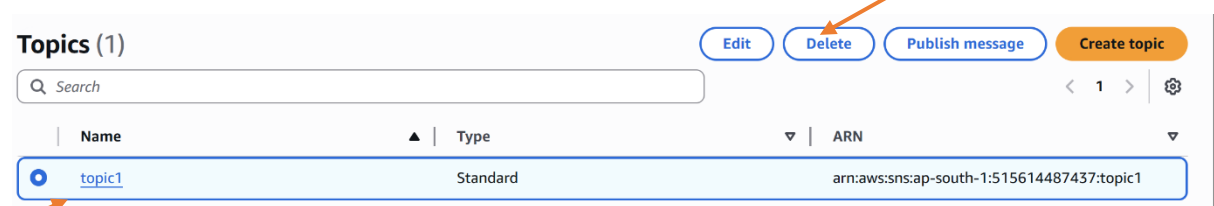

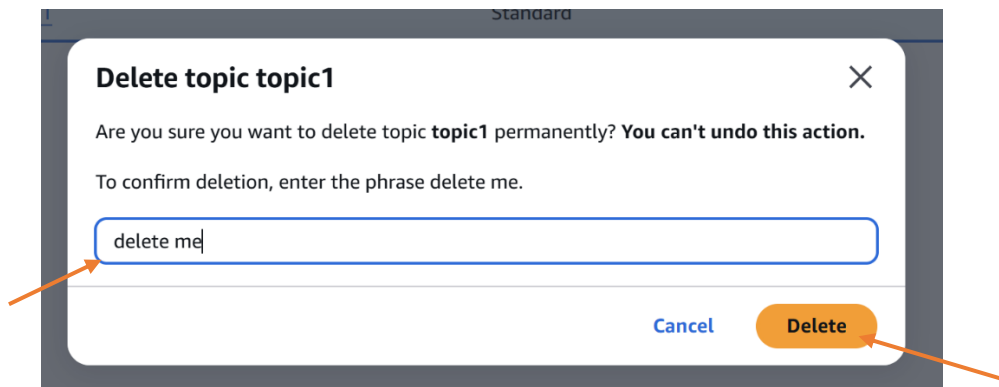- Click on "Delete" button.

- Subscription deleted successfully.

How to create Topic:-

Step10:-

- Select topic and click on "delete".

- Write "delete me" and click in "Delete".

- Write "delete me" and click in "Delete".