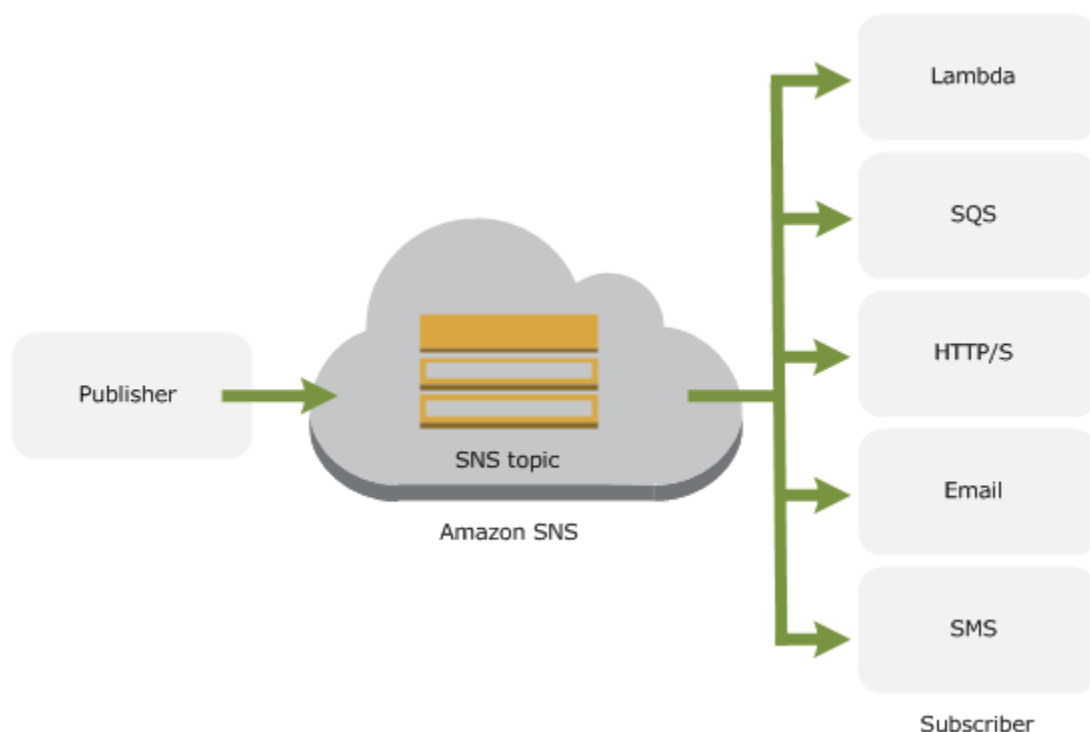


AWS Solution Architect Associate Certification Training – Module 19

19. Simple Notification Services

Introduction to Simple Notification Services

Amazon Simple Notification Service (Amazon SNS) is a web service that coordinates and manages the delivery or sending of messages to subscribing endpoints or clients. In Amazon SNS, there are two types of clients—publishers and subscribers—also referred to as producers and consumers. Publishers communicate asynchronously with subscribers by producing and sending a message to a topic, which is a logical access point and communication channel. Subscribers (i.e., web servers, email addresses, Amazon SQS queues, AWS Lambda functions) consume or receive the message or notification over one of the supported protocols (i.e., Amazon SQS, HTTP/S, email, SMS, Lambda) when they are subscribed to the topic.



When using Amazon SNS, you (as the owner) create a topic and control access to it by defining policies that determine which publishers and subscribers can communicate with the topic. A publisher sends messages to topics that they have created or to topics they have permission to publish to. Instead of including a specific destination address in each message, a publisher sends a message to the topic. Amazon SNS matches the topic to a list of subscribers who have subscribed to that topic, and delivers the message to each of those subscribers. Each topic has a unique name that identifies the Amazon SNS endpoint for publishers to post messages and subscribers to register for notifications. Subscribers receive all messages published to the topics to which they subscribe, and all subscribers to a topic receive the same messages.

Components of SNS

- Topics
- Publishers
- Subscriptions

Topics

An Amazon SNS topic is a logical access point which acts as a communication channel. A topic lets you group multiple endpoints (such as AWS Lambda, Amazon SQS, HTTP/S, or an email address). To broadcast the messages of a message-producer system (for example, an e-commerce website) working with multiple other services that require its messages (for example, checkout and fulfillment systems), you can create a topic for your producer system.

The first and most common Amazon SNS task is creating a topic.

Publishers

The system which fan out messages are all publishers

Subscriptions

The AWS SNS Subscription resource subscribes an endpoint to an Amazon Simple Notification Service (Amazon SNS) topic. For a subscription to be created, the owner of the endpoint must confirm the subscription.

After you create a topic and subscribe an endpoint to it, you can *publish* messages to a topic. When the message is published, Amazon SNS attempts to deliver the message to every endpoint (such as AWS Lambda, Amazon SQS, HTTP/S, or an email address) subscribed to the topic.