

Problem Statement:

You work for XYZ Corporation. Your team is asked to deploy similar architecture multiple times for testing, development, and production purposes. Implement CloudFormation for the tasks assigned to you below.

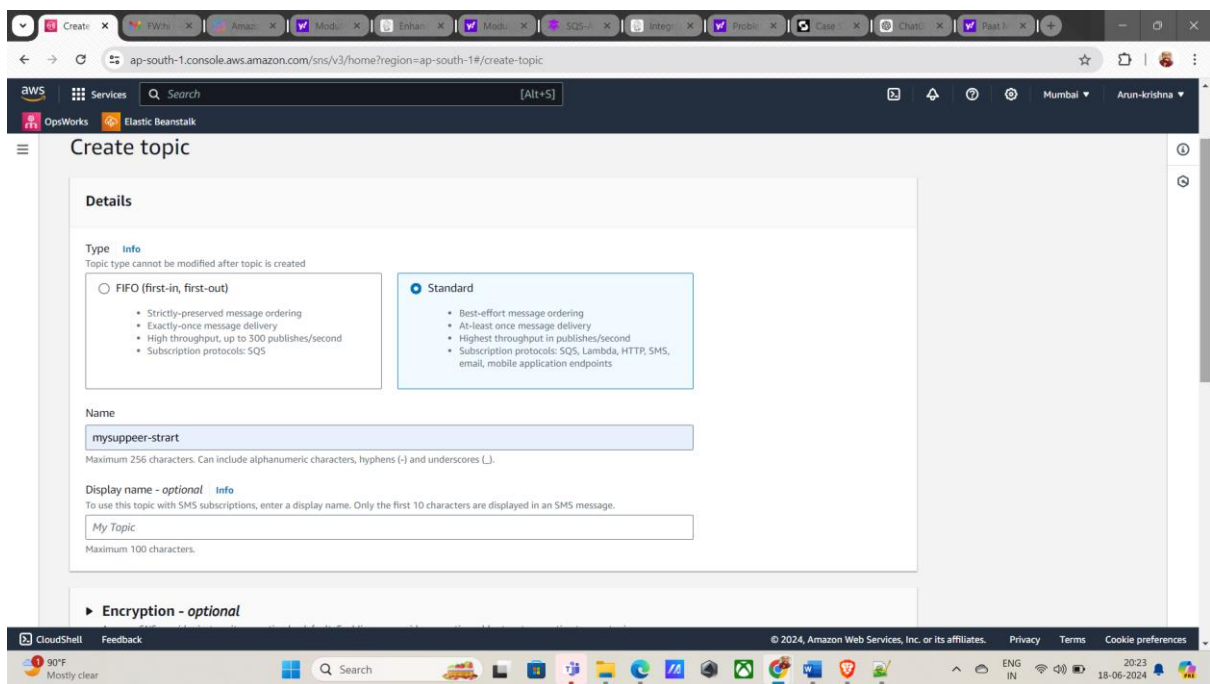
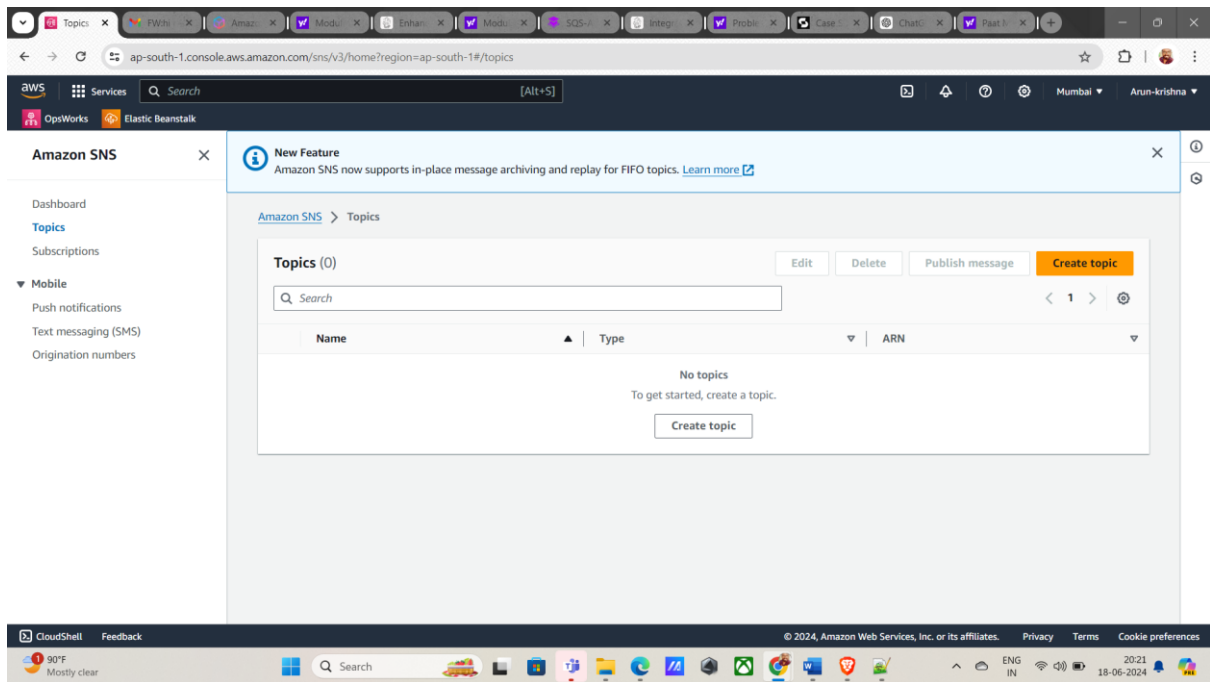
Tasks To Be Performed:

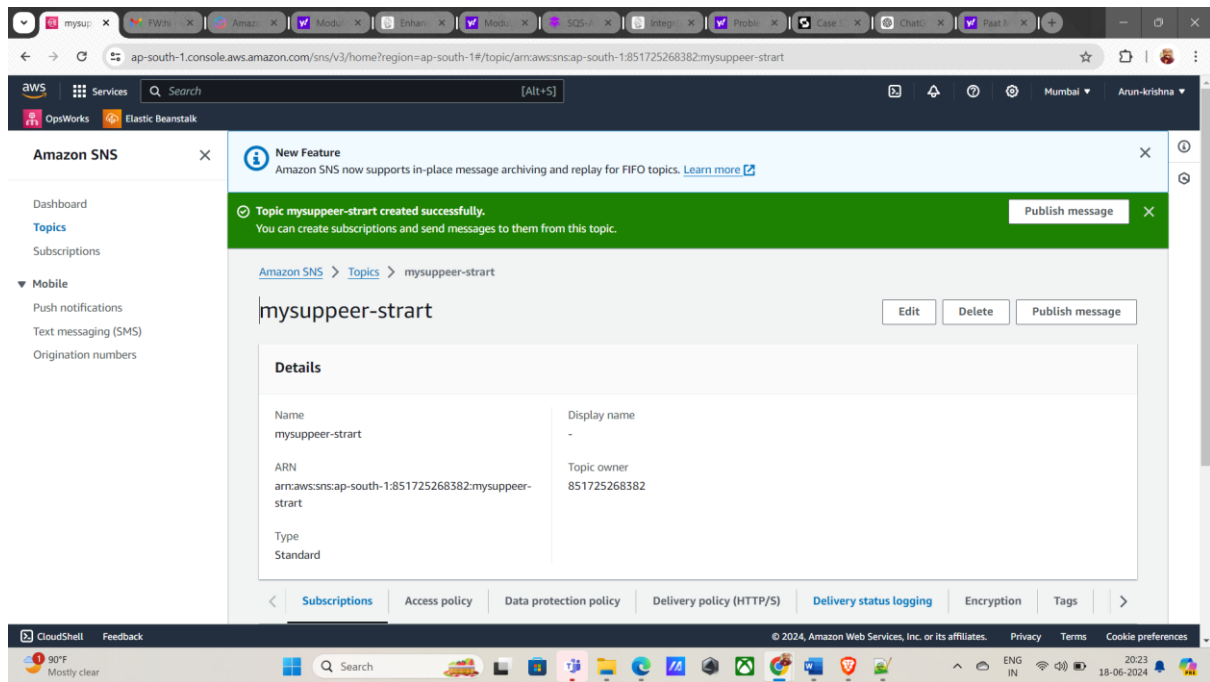
1. Use the template from CloudFormation task 1.

2. Add Notification to the CloudFormation stack using SNS so that you get a notification via mail for every step of the stack creation process.

1. Create the SNS Topic

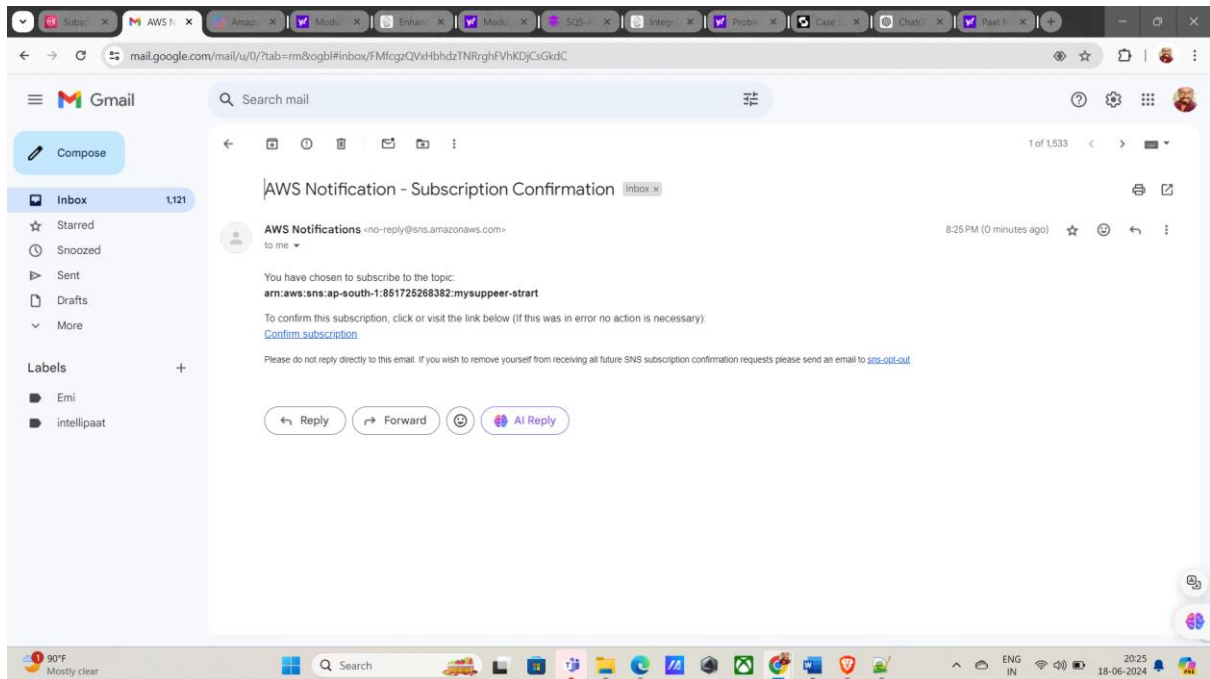
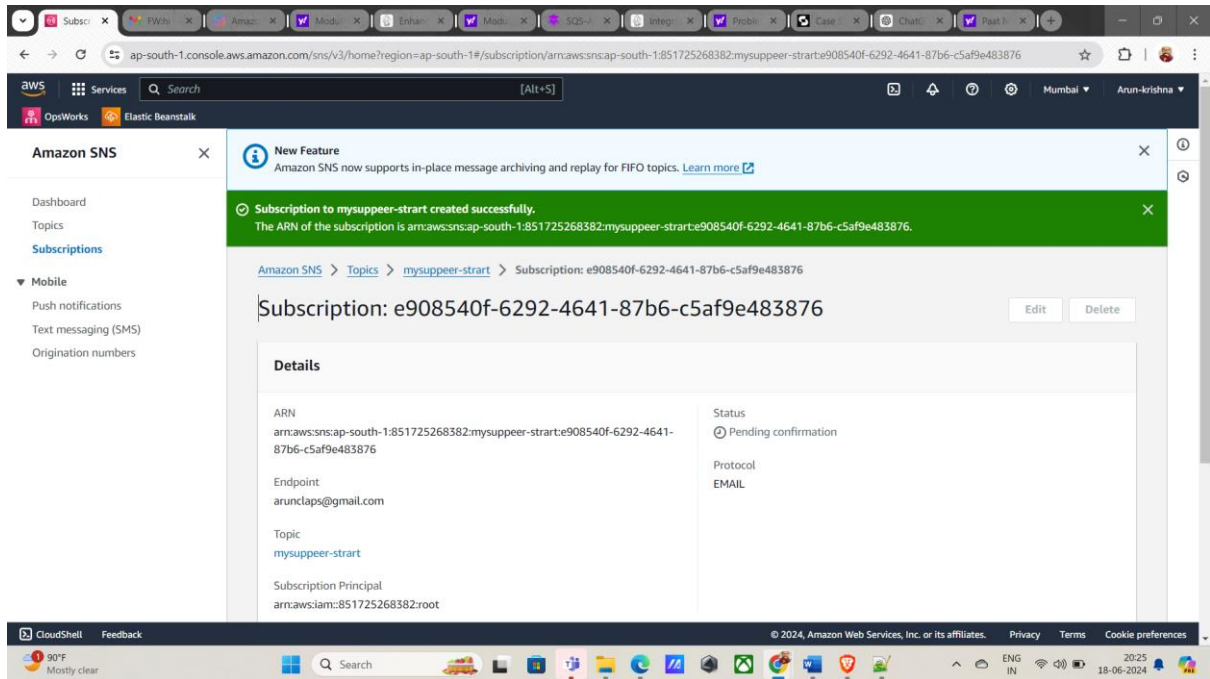
1. **Log into AWS Management Console:**
 - Open your web browser and navigate to the [AWS Management Console](#).
 - Enter your credentials to log in.
2. **Access SNS Service:**
 - In the search bar at the top, type “SNS” or “Simple Notification Service” and select it from the dropdown.
3. **Create a New Topic:**
 - In the SNS dashboard, click on “Topics” in the left sidebar.
 - Click on the “Create topic” button.
4. **Configure the Topic:**
 - Select “Standard” as the type. (Note: FIFO topics don’t offer email subscription.)
 - Provide a name for your topic, e.g., CloudFormationNotifications.
 - Click on “Create topic”.
5. **Copy the Topic ARN:**
 - Once the topic is created, click on it to view its details.
 - Copy the Topic ARN (e.g., arn:aws:sns:us-east-1:838427752759:CloudFormationNotifications) as you will need it later.





Subscribe Your Email to the SNS Topic

- 1. Create a Subscription:**
 - While in the topic details, click on “Create subscription”.
- 2. Set Subscription Details:**
 - For “Protocol”, choose Email.
 - In the “Endpoint”, enter the email address where you want to receive notifications.
 - Click on “Create subscription”.
- 3. Confirm Subscription:**
 - Check your email for a message from AWS asking to confirm the subscription.
 - Click on the link in the email to confirm.

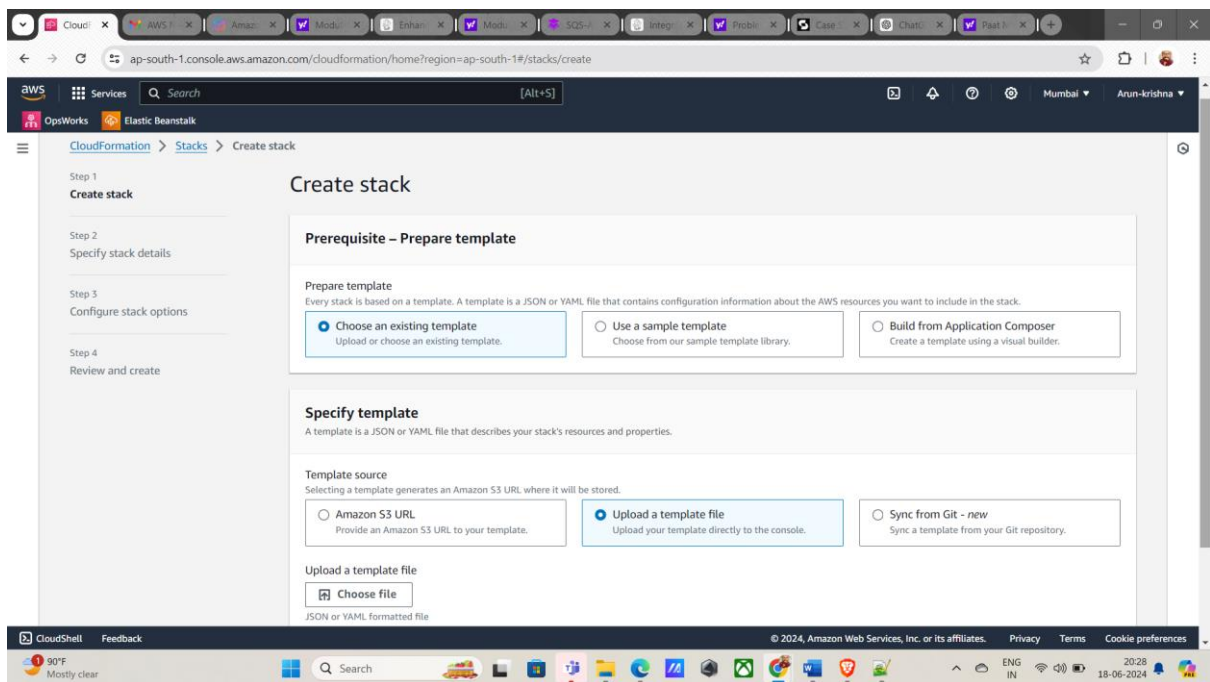
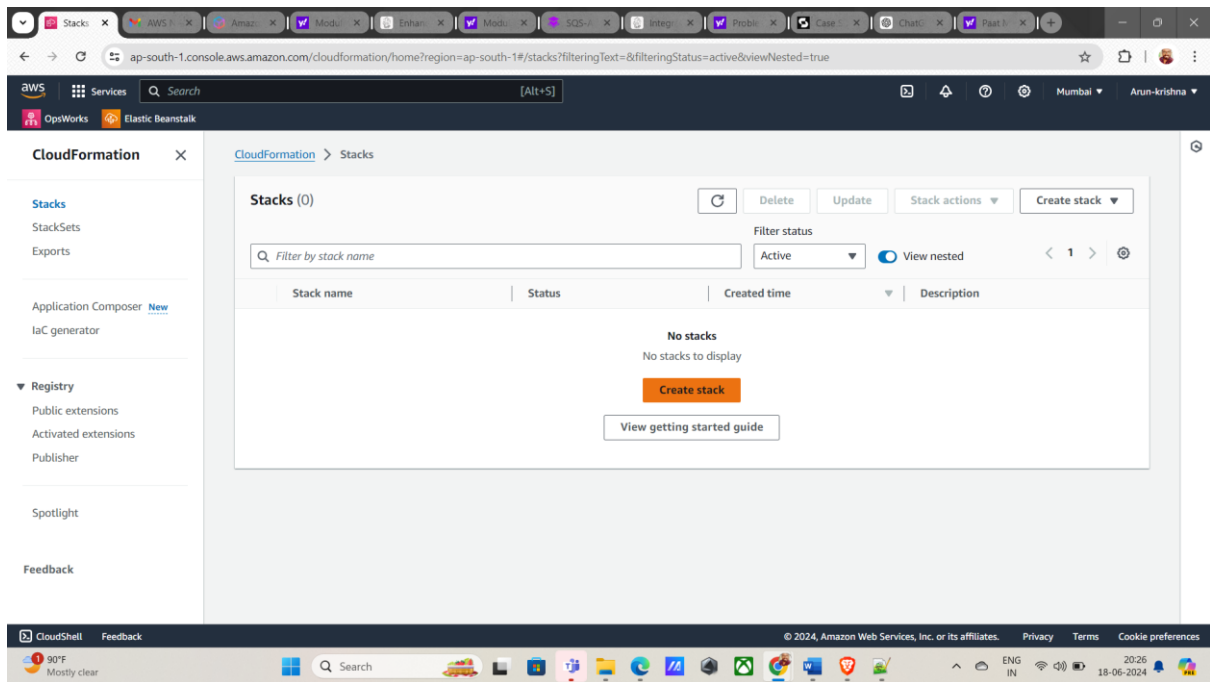


Deploy the CloudFormation Stack

1. **Access CloudFormation Service:**
 - In the AWS Management Console, navigate to the CloudFormation service by typing “CloudFormation” in the search bar and selecting it.
2. **Create a New Stack:**
 - Click on “Create stack”.
 - Choose “Upload a template file” and upload the CloudFormation template file used in Assignment 2 – CloudFormation VPC Template.
3. **Specify Details:**
 - When prompted, enter an email address for receiving CloudFormation notifications.
 - Click “Next”.
4. **Name Your Stack:**
 - Provide a unique name for your stack, e.g., EC2VPC.
 - Click “Next”.
5. **Configure Stack Options:**
 - In the “Configure stack options” page, scroll to the “Advanced options” section.
 - Under the “Amazon SNS topics” heading, paste the Topic ARN you copied earlier.
6. **Review and Create Stack:**
 - Continue through the stack creation process, reviewing the details.
 - Click “Create stack” to start the creation.

4. Monitor the Stack Creation and Check Notifications

1. **Monitor Progress:**
 - Go to the CloudFormation Dashboard to view the progress of your stack.
 - You will start receiving email notifications about the stack creation status because of the SNS topic setup.
2. **Open Notification Emails:**
 - Open the emails received to check the details of the notifications.



Specify stack details

Parameters

Parameters are defined in your template and allow you to input custom v

EmailAddress

Email address for CloudFormation notifications

Advanced options

You can set additional options for your stack, like n

► Stack policy

Defines the resources that you want to prot

► Rollback configuration

Specify alarms for CloudFormation to moni







▼ Notification options

SNS topic ARN - optional

arn:aws:sns:us-east-1:838427752759:C

Add SNS topic

Create new SNS topic

SENDER	SUBJECT	VIEW
<ul style="list-style-type: none">  AWS Notifications no-reply@sns.amazonaws.com 	AWS CloudFormation Notification	>
<ul style="list-style-type: none">  AWS Notifications no-reply@sns.amazonaws.com 	AWS CloudFormation Notification	>
<ul style="list-style-type: none">  AWS Notifications no-reply@sns.amazonaws.com 	AWS CloudFormation Notification	>
<ul style="list-style-type: none">  AWS Notifications no-reply@sns.amazonaws.com 	AWS CloudFormation Notification	>
<ul style="list-style-type: none">  AWS Notifications no-reply@sns.amazonaws.com 	AWS CloudFormation Notification	>
<ul style="list-style-type: none">  AWS Notifications no-reply@sns.amazonaws.com 	AWS CloudFormation Notification	>

Subject: AWS CloudFormation Notification

```
StackId='arn:aws:cloudformation:us-east-1:838427752759:stack/EC2VPC/40e124b0-65ef-11ee-8a10-0e77e577fc01'
Timestamp='2023-10-08T15:28:10.766Z'
EventId='PublicSubnet-CREATE_IN_PROGRESS-2023-10-08T15:28:10.766Z'
LogicalResourceId='PublicSubnet'
Namespace='838427752759'
ResourceProperties='{
  "VpcId": "vpc-0d8f0cbb93b45f6e4",
  "MapPublicIpOnLaunch": true,
  "CidrBlock": "10.0.1.0/24",
  "Tags": [
    {
      "Value": "AssignmentPublicSubnet",
      "Key": "Name"
    }
  ]
}'
ResourceStatus='CREATE_IN_PROGRESS'
ResourceStatusReason=''
ResourceType='AWS::EC2::Subnet'
StackName='EC2VPC'
ClientRequestToken='Console-CreateStack-9316be78-d1ad-4512-169f-3205dc2a4314'
```

If you wish to stop receiving notifications from this topic, please click or visit the link below to unsubscribe:
<https://sns.us-east-1.amazonaws.com/unsubscribe.html?SubscriptionArn=arn:aws:sns:us-east-1:838427752759:CloudFormationNotifications:9c3eae1-c582-45da-8eaf-9d7303e69398&Endpoint=retojih542@klanze.com>
 Please do not reply directly to this email. If you have any questions or comments regarding this email, please contact us at <https://aws.amazon.com/support>