

CloudWatch Alarm Creation

In this process I created a CloudWatch alarm to alert, when CPU usage exceeds 60%, and send an email notification.

Step 1: Create an SNS Email Notification

- Go to AWS Console.
- Search SNS.
- Create a new topic.
- Select **Standard**.

The screenshot shows the AWS Management Console interface for creating a new SNS topic. At the top, there's a navigation bar with the AWS logo, a search bar, and the user's name 'Sri Vignesh'. Below the navigation bar, the breadcrumb trail reads 'Amazon SNS > Topics > Create topic'. A blue banner at the top of the main content area announces a 'New Feature' about High Throughput FIFO topics. The main section is titled 'Create topic' and contains a 'Details' panel. Inside the 'Details' panel, the 'Type' section shows two options: 'FIFO (first-in, first-out)' and 'Standard'. The 'Standard' option is selected with a blue radio button. Below the type selection, there are two text input fields: 'Name' with the value 'testemailinfo' and 'Display name - optional' with the value 'My Topic'. The bottom of the console shows a Windows taskbar with various application icons and a system tray displaying the time as 17:38 on 02-08-2025.

ap-south-1.console.aws.amazon.com/sns/v3/home?region=ap-south-1#/create-topic

Amazon SNS > Topics > Create topic

New Feature
Amazon SNS now supports High Throughput FIFO topics. [Learn more](#)

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

testemailinfo

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

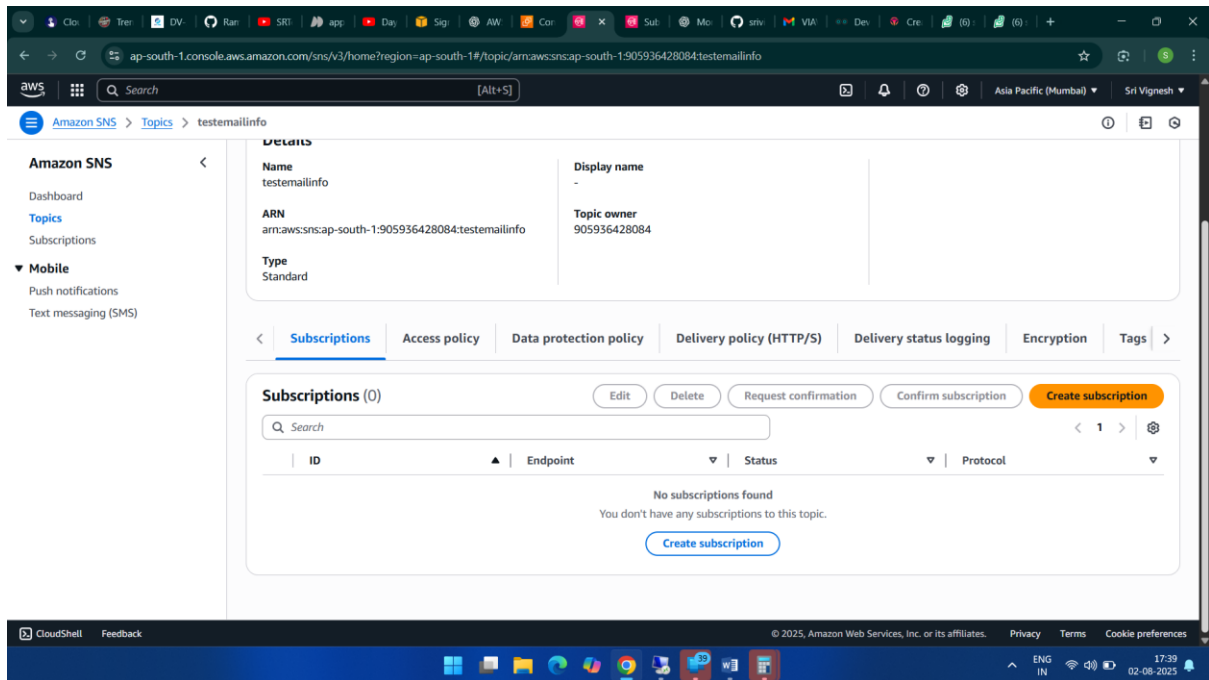
Maximum 100 characters.

CloudShell Feedback

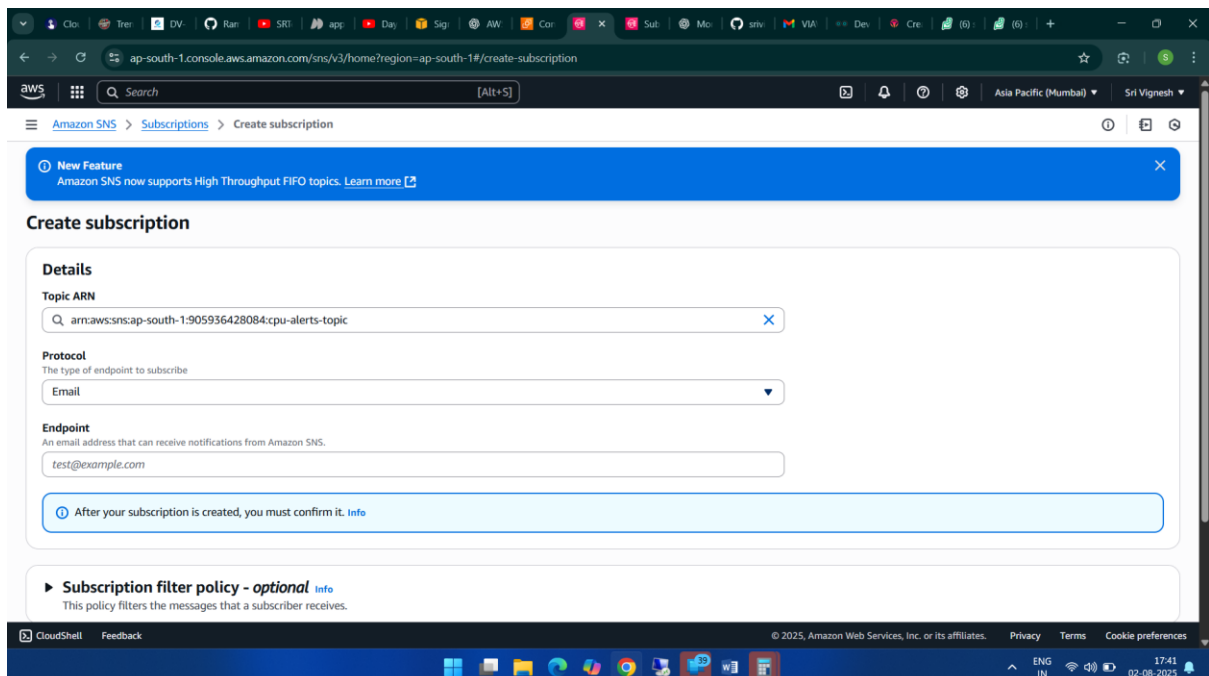
© 2025, Amazon Web Services, Inc. or its affiliates. [Privacy](#) [Terms](#) [Cookie preferences](#)

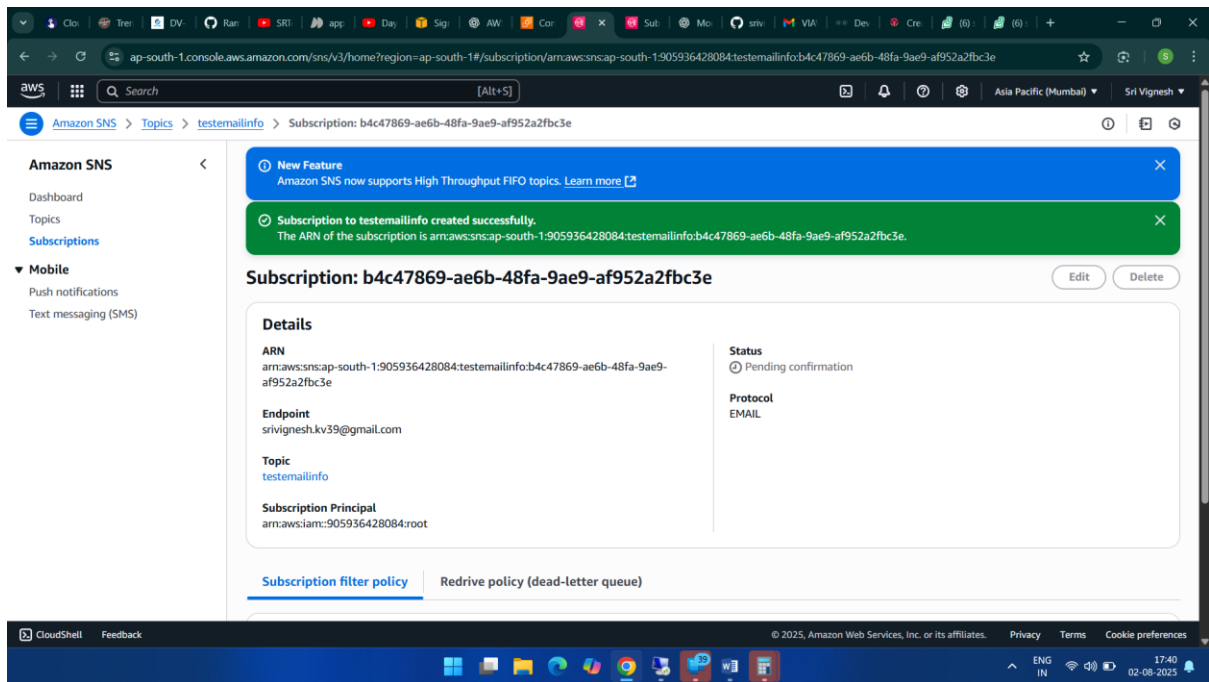
ENG IN 17:38 02-08-2025

- Just name it and create the topic.
- In that page look for create subscription.

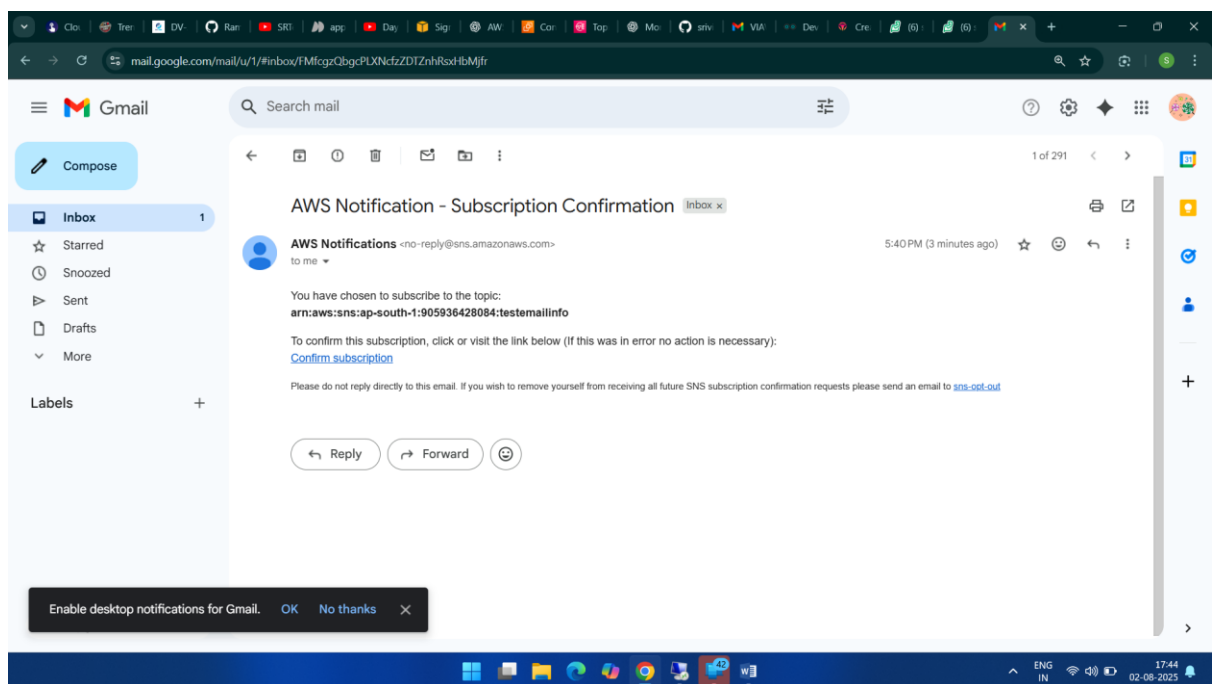


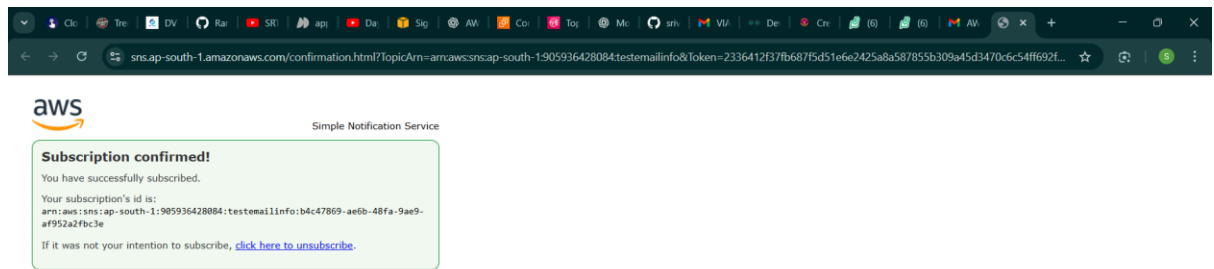
- Select Protocol as an Email
- Give email there.
- Save this.





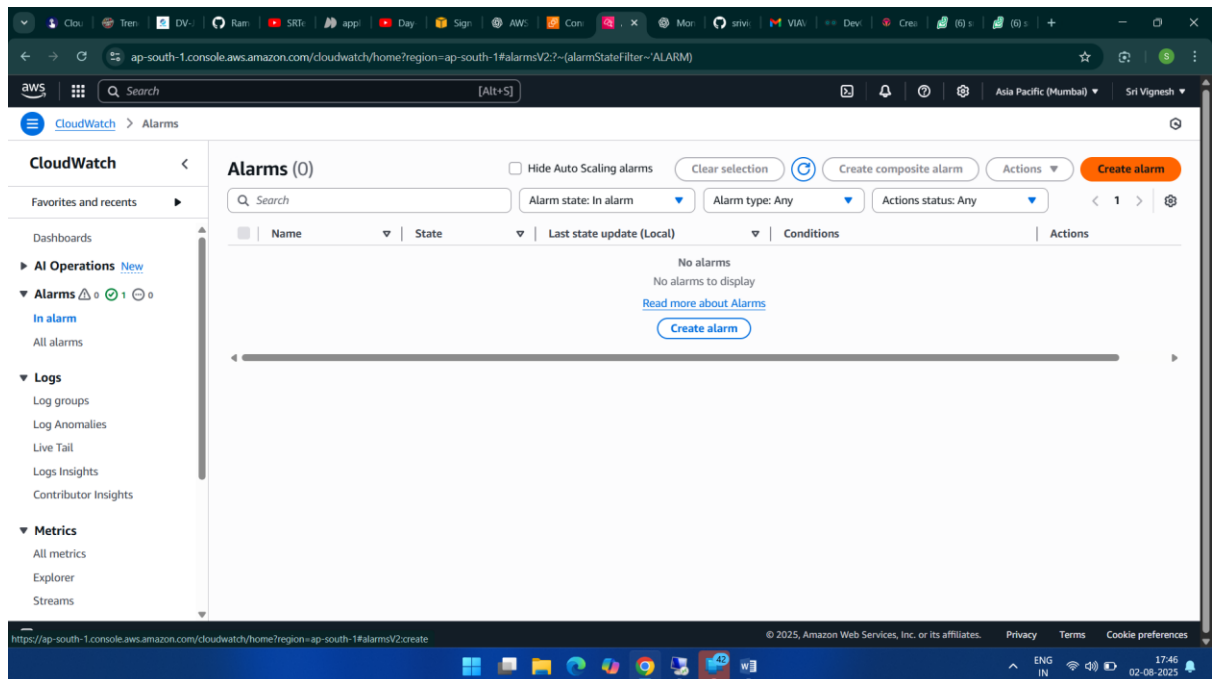
- There will be a confirmation email comes to the email. Tap and confirm this subscription.



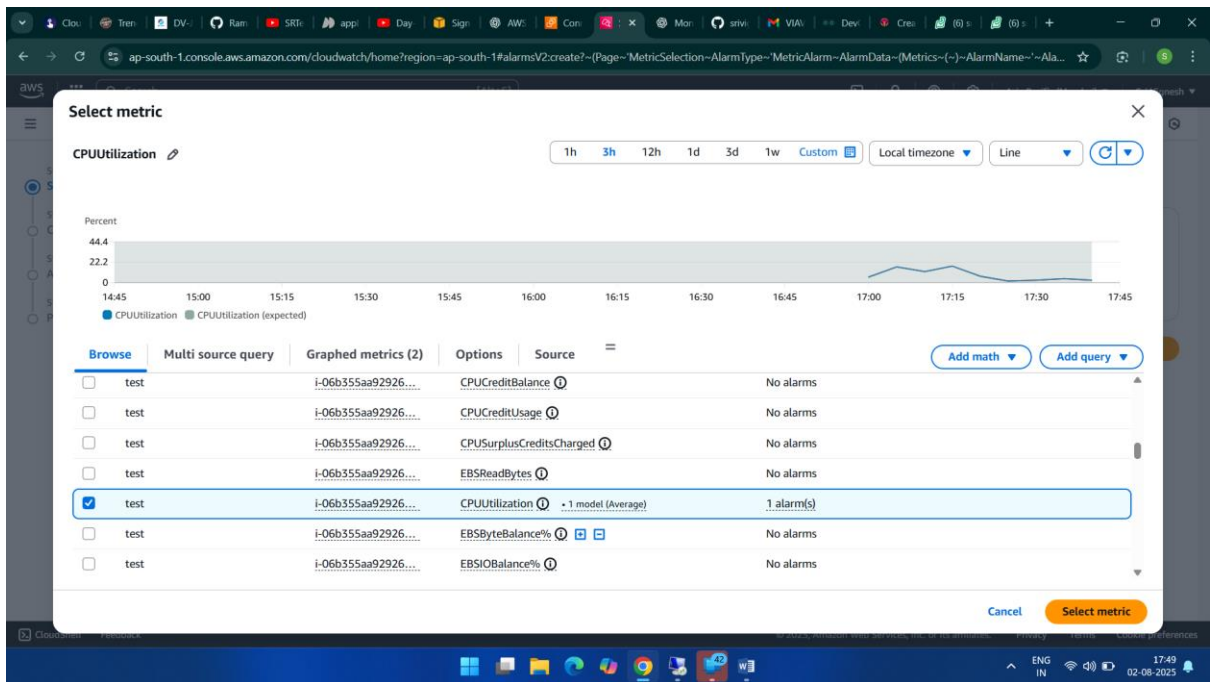


Step 2: Create a Cloudwatch Alarm

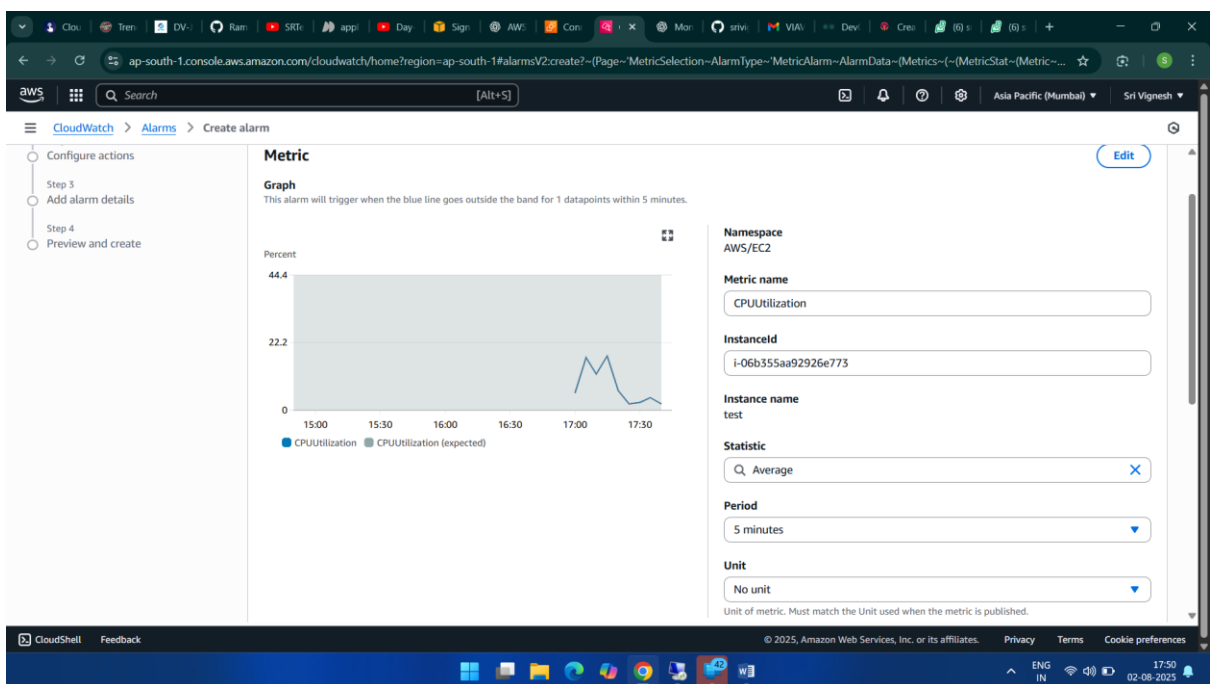
- Go to Cloudwatch page.
- Click Create Alarm.



- Click “Select Metric”
- Select Service -> “EC2” ->”Pre-instacne Metrics” ->”Select the instance and specific Metric name”. Here I selected the CPU utilization.



- In below image it shows the configuration page. Where we can work with time period.



- In condition select threshold type as: "Static" -> "Greater" -> threshold: "60".
- Select next.

Unit of metric. Must match the Unit used when the metric is published.

Conditions

Threshold type

☒ **Static**
Use a value as a threshold

☐ **Anomaly detection**
Use a band as a threshold

Whenever CPUUtilization is...
Define the alarm condition.

☒ **Greater**
> threshold

☐ **Greater/Equal**
>= threshold

☐ **Lower/Equal**
≤ threshold

☐ **Lower**
< threshold

than...
Define the threshold value.

60

Must be a number.

► **Additional configuration**

Cancel Next

- Send notification to : Select the create SNS Topic.

Alarm recommendations available
Turn on Recommendations to pre-populate the wizard with the recommended alarms.

Step 1: Specify metric and conditions
Step 2: **Configure actions**
Step 3: Add alarm details
Step 4: Preview and create

Configure actions

Notification

Alarm state trigger
Define the alarm state that will trigger this action.

☒ **In alarm**
The metric or expression is outside of the defined threshold.

☐ **OK**
The metric or expression is within the defined threshold.

☐ **Insufficient data**
The alarm has just started or not enough data is available.

Send a notification to the following SNS topic
Define the SNS (Simple Notification Service) topic that will receive the notification.

☒ **Select an existing SNS topic**

☐ **Create new topic**

☐ **Use topic ARN to notify other accounts**

Send a notification to...

testemailinfo

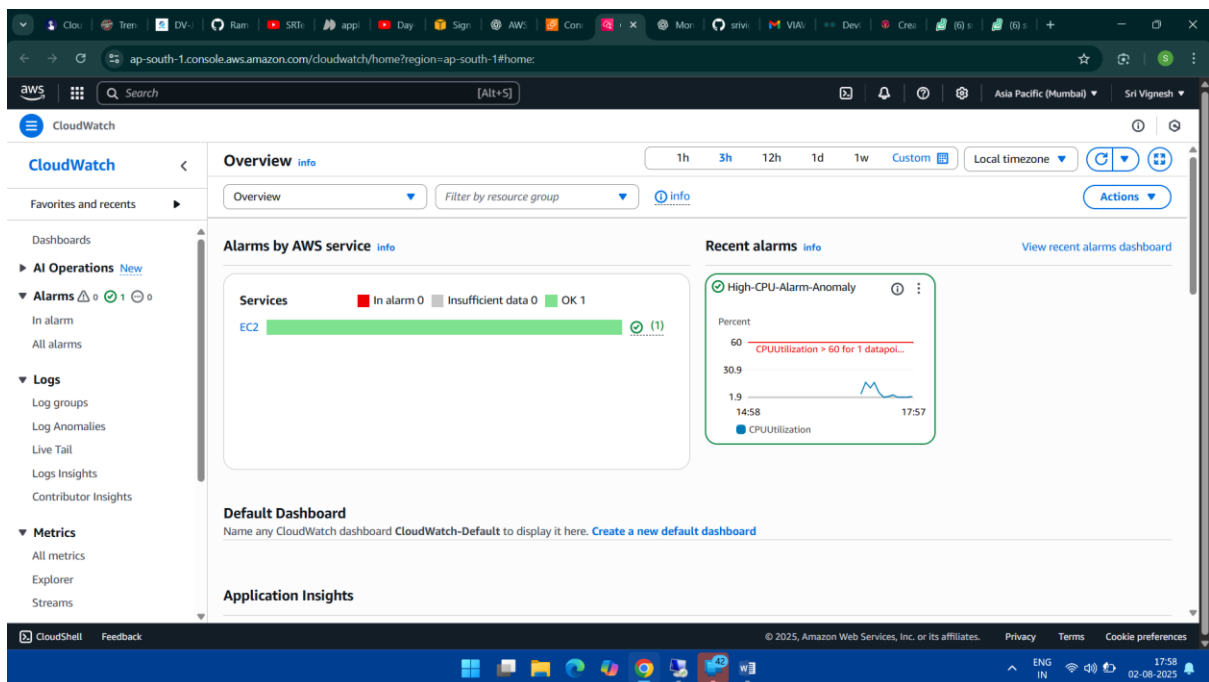
Only topics belonging to this account are listed here. All persons and applications subscribed to the selected topic will receive notifications.

Email (endpoints)

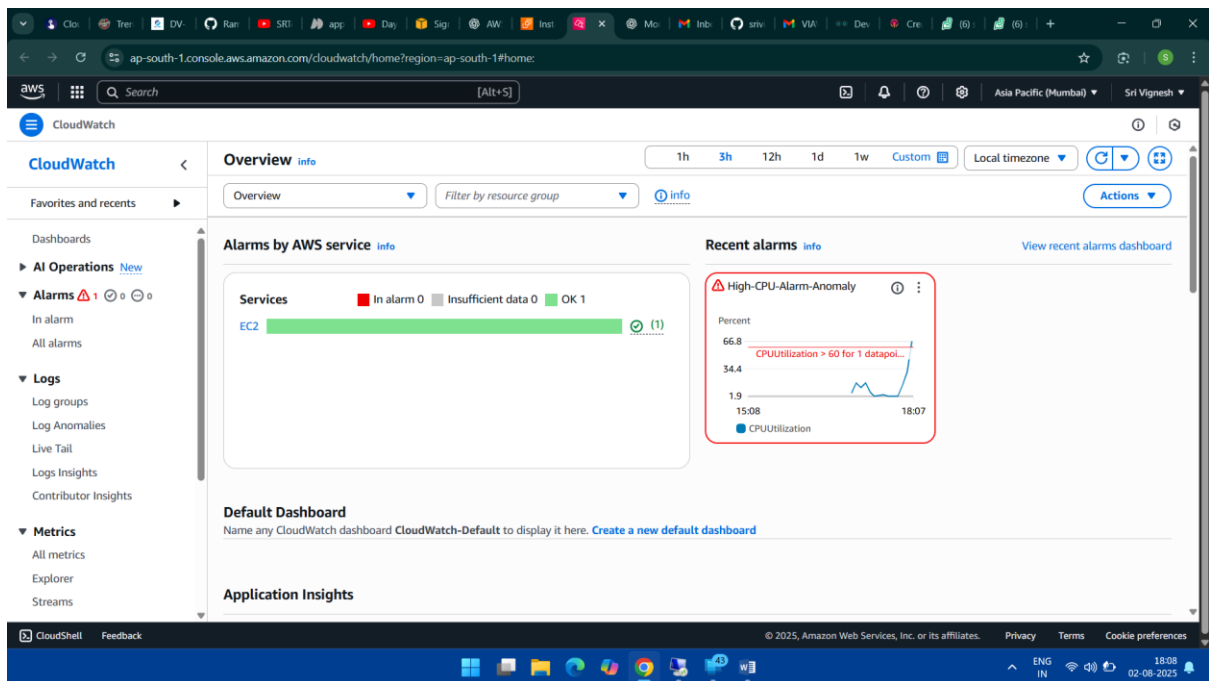
testemailinfo@gmail.com

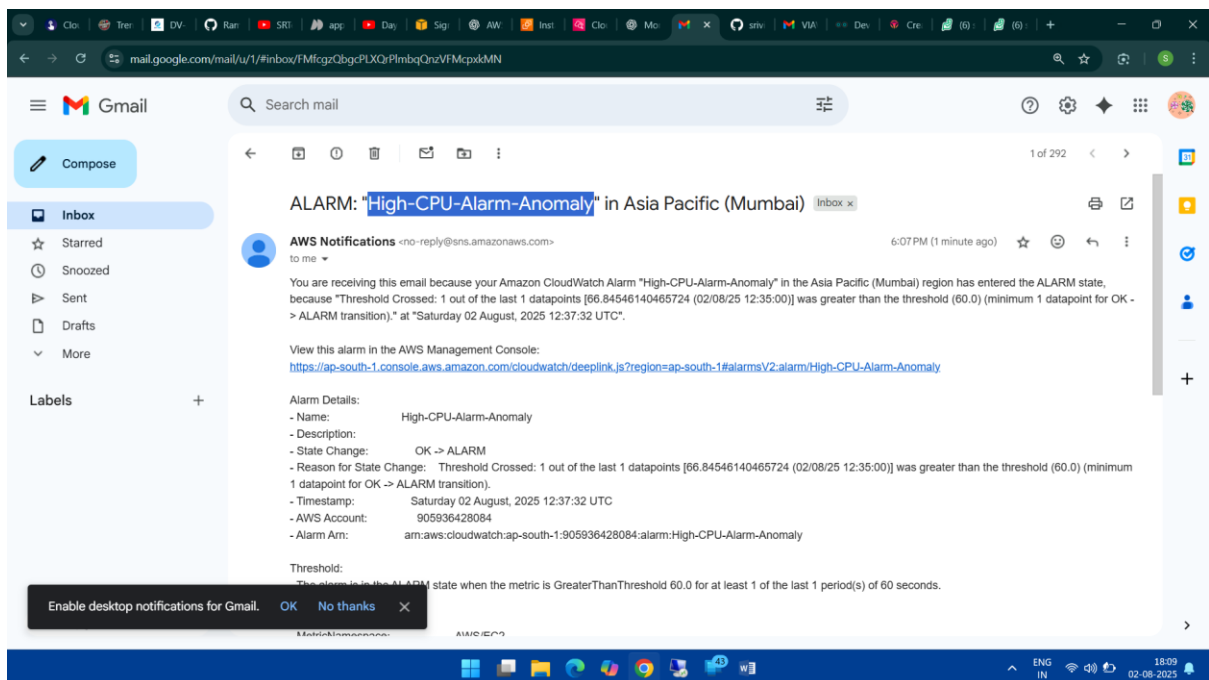
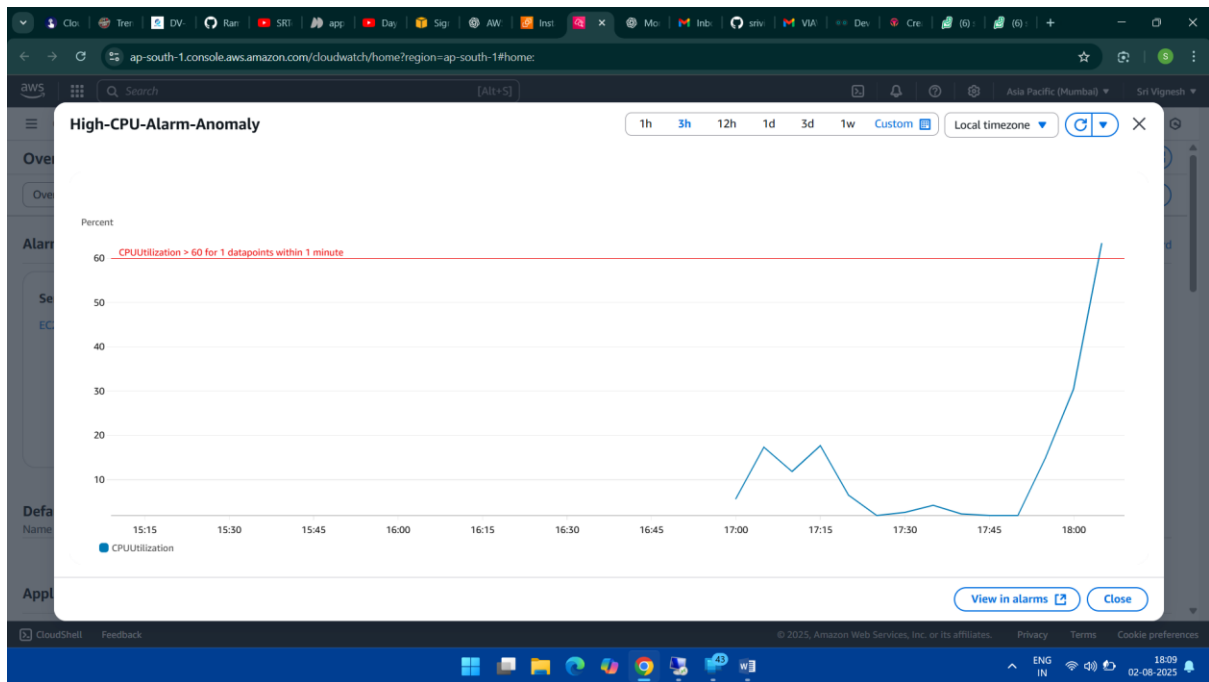
- Click next.
- Name this and create an alarm.

Now the alarm is active.



Where the limit is breached, an alarm should triggered.





- This should trigger alarm with time interval of 1 minute (changable) use 5 mins. When ever the alarm triggrred an email should be delivered.