

Task 2: AWS CloudWatch Monitoring and Alerting

✓ Objective

Set up monitoring and alerting for EC2 instances using **AWS CloudWatch**. This task focuses on tracking system performance, creating alarms, and configuring alert notifications via email.

Steps Performed

Created a CloudWatch Dashboard

- Added a **line graph widget** to visualize metrics over time.
- Configured a dashboard to monitor **two EC2 instances**.

Added the Following 4 Metric Widgets:

- **CPUUtilization** – Tracks the CPU usage.
- **NetworkIn** – Measures incoming traffic.
- **NetworkOut** – Measures outgoing traffic.
- **StatusCheckFailed** – Indicates instance health issues.

Created a CloudWatch Alarm

- Metric: **CPUUtilization**
- Condition: **Greater than 80%** for **2 evaluation periods** (5 minutes each)
- Associated the alarm with the CloudWatch dashboard.

Configured SNS for Alerts

- Created a new **SNS topic** for alarm notifications.
- Subscribed my email address to the topic.

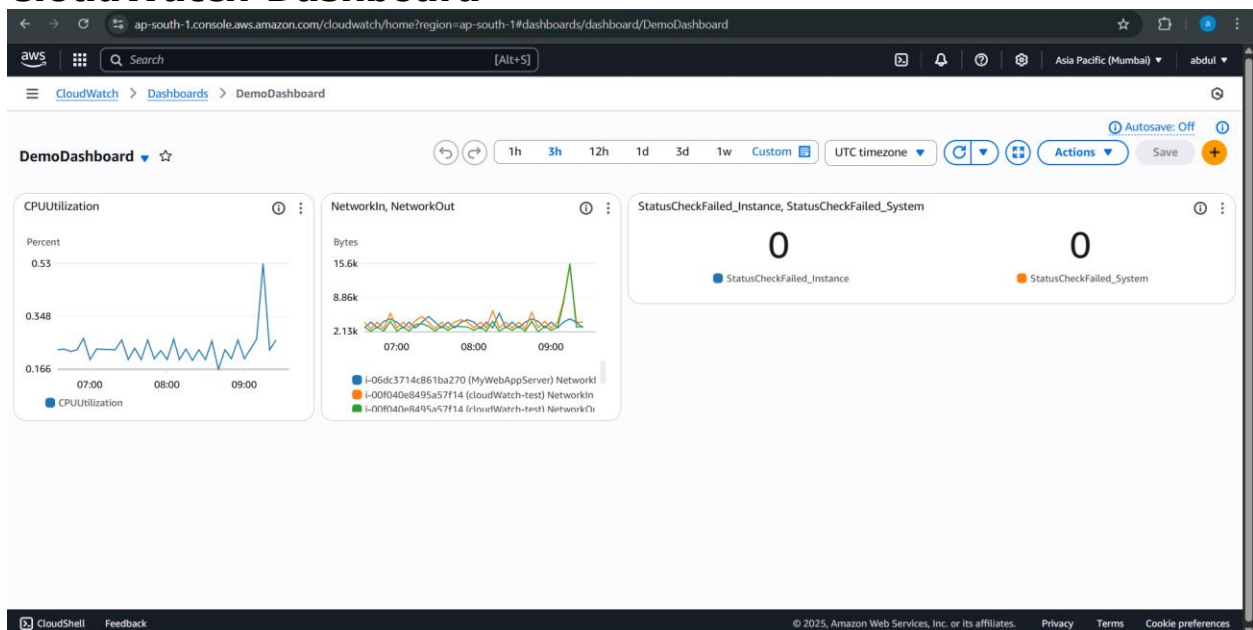
- Received the **confirmation email** and successfully confirmed the subscription.

Final CloudWatch Dashboard

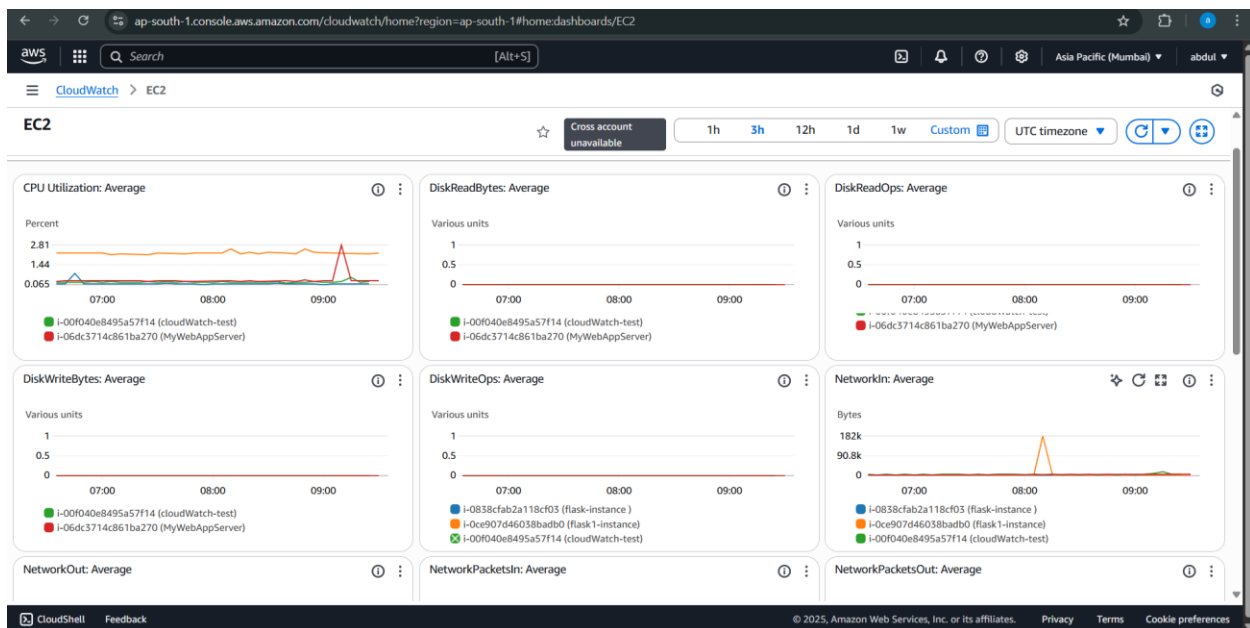
- Included CPU Utilization for **both EC2 instances**.
- Displayed alarm status on the dashboard.
- Real-time visualization for effective monitoring.

Screenshots

CloudWatch Dashboard



CPU Utilization Widget

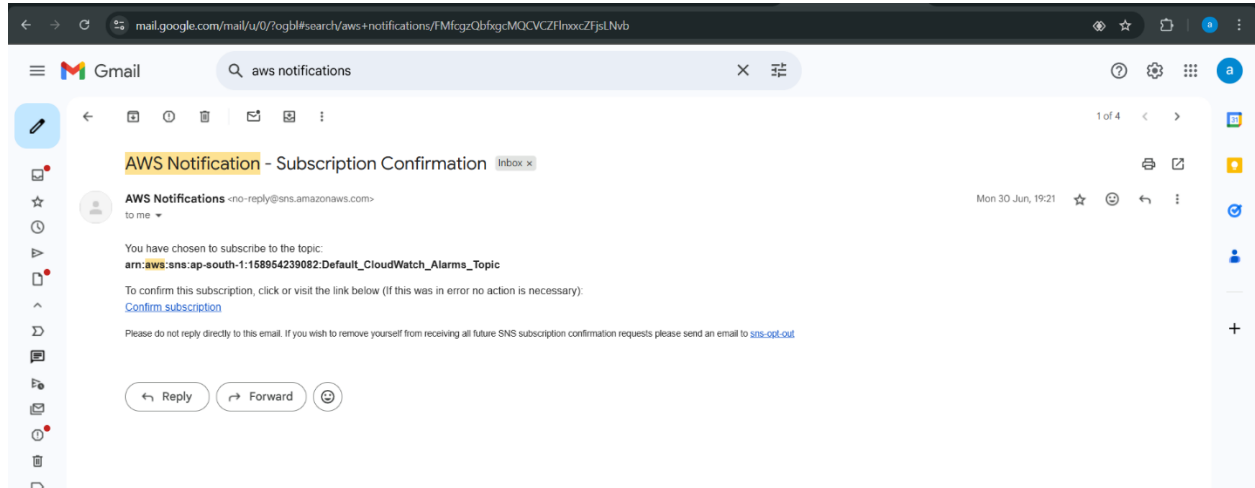


Alarm Creation

The screenshot displays the AWS CloudWatch console for the 'Alarms (1/2)' page. The page includes a search bar, filters for alarm state and type, and a 'Create alarm' button. The left sidebar shows the 'Alarms' section selected under 'AI Operations'. The main content area displays a table of alarms.

Name	State	Last state update (UTC)	Conditions	Actions
<input checked="" type="checkbox"/> cloudwatchDemoAlarm	OK	2025-06-30 16:26:02	CPUUtilization > 85 for 1 datapoints within 5 minutes	Actions enabled Warn
<input type="checkbox"/> CPU-Utilization-i-00f040e8495a57f14	OK	2025-06-28 18:03:54	CPUUtilization > 80 for 1 datapoints within 5 minutes	Actions enabled Warn

Email Confirmation



Status

✓ **Task Completed**

? Date: [1st July 2025]

? AWS Service Used: CloudWatch, EC2, SNS