📊 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 70% for 2 evaluation periods (5 minutes each)
- Associated the alarm with the CloudWatch dashboard.

Configured SNS for Alerts

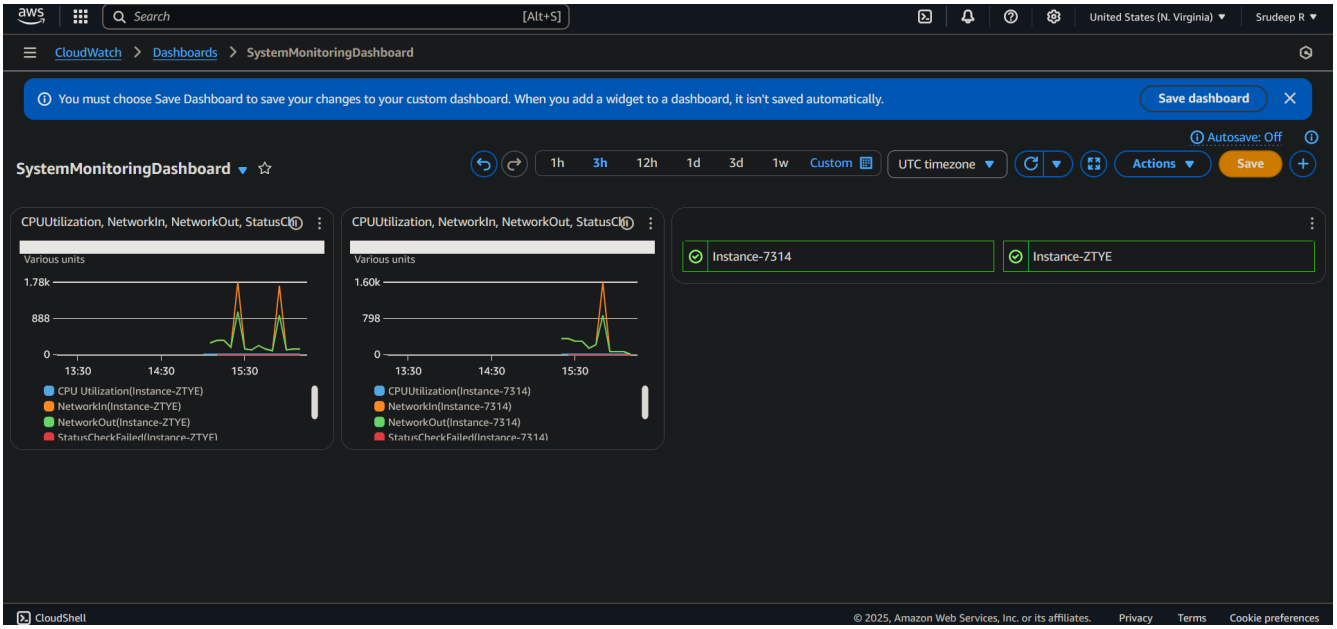
- Created a new SNS topic for alarm notifications.
- Subscribed my email address to the topic.
- Received the confirmation email and successfully confirmed the subscription.

Final CloudWatch Dashboard

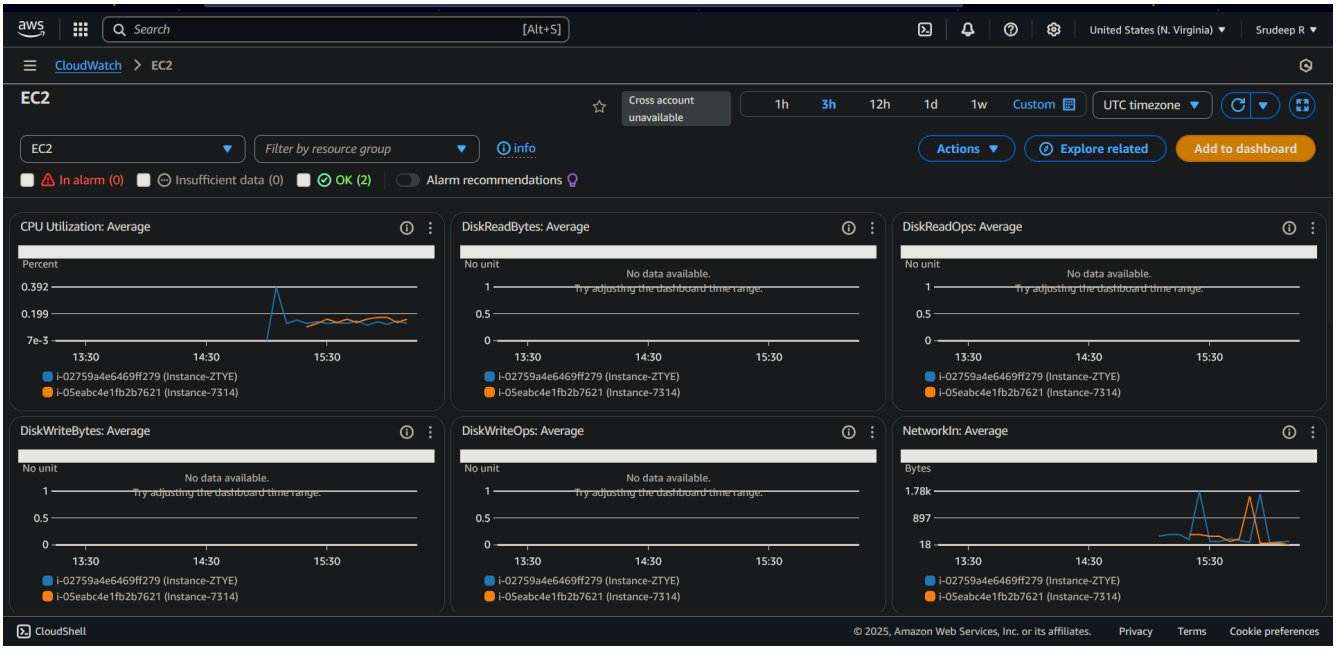
- Included CPU Utilization for both EC2 instances.
- Displayed alarm status on the dashboard.
- Real-time visualization for effective monitoring.

Screenshots

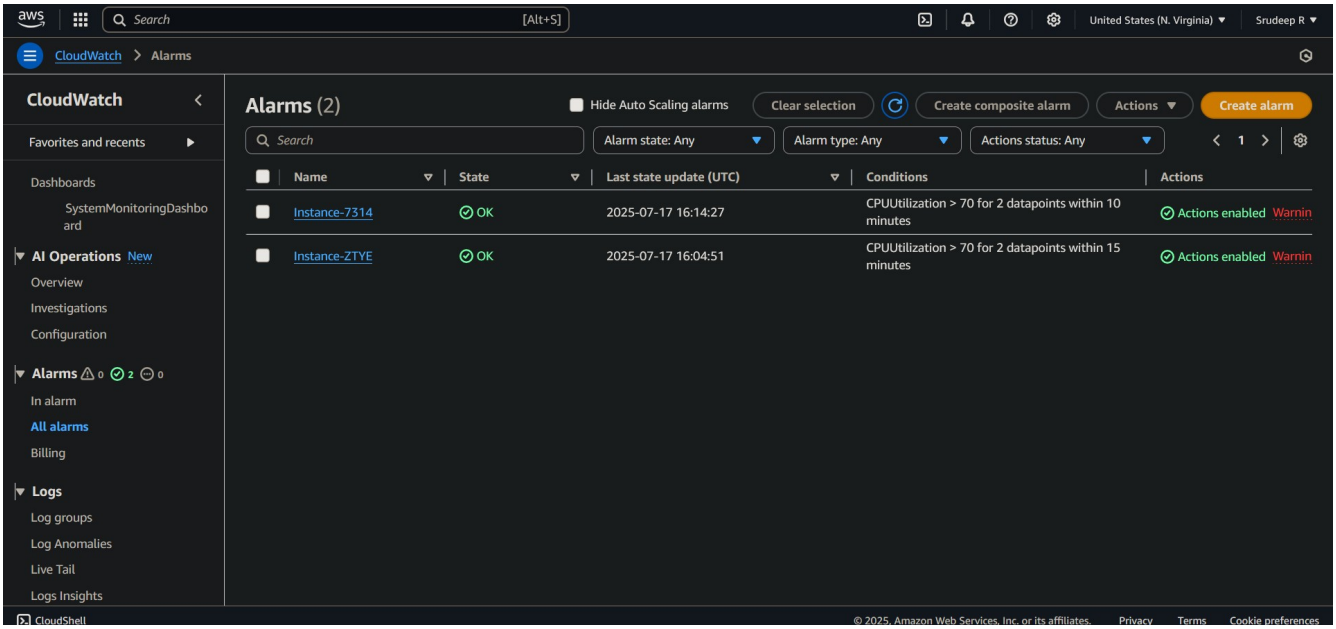
CloudWatch Dashboard



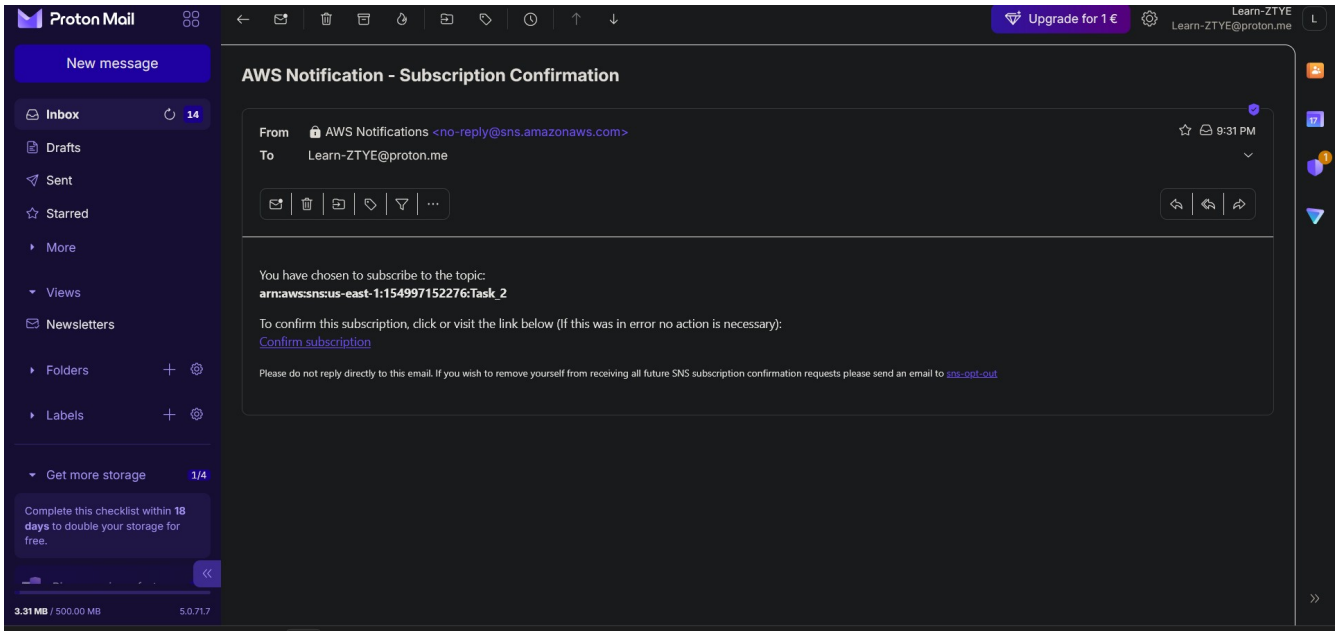
CPU Utilization Widget



⚠ Alarm Creation



Email Confirmation



📚 What I Learned

- How to create and manage dashboards in AWS CloudWatch.
- How to configure CloudWatch Alarms for metric-based triggers.
- How to use SNS for alerting via email.
- Importance of real-time monitoring in a cloud infrastructure.

📅 Status

✅ Task Completed

📅 Date: [17th July 2025]

🖥️ AWS Service Used: CloudWatch, EC2, SNS