



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

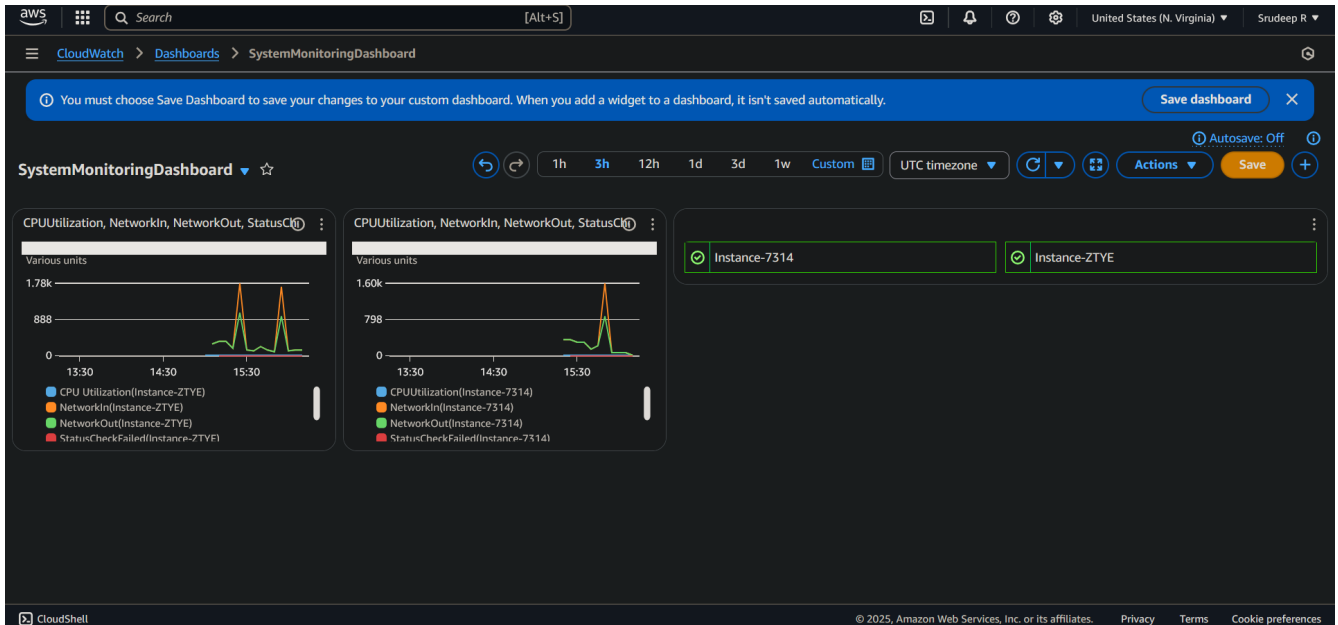
- Created a new SNS topic for alarm notifications.
- Subscribed my email address to the topic.
- Received the confirmation email and successfully confirmed the subscription.

Final CloudWatch Dashboard

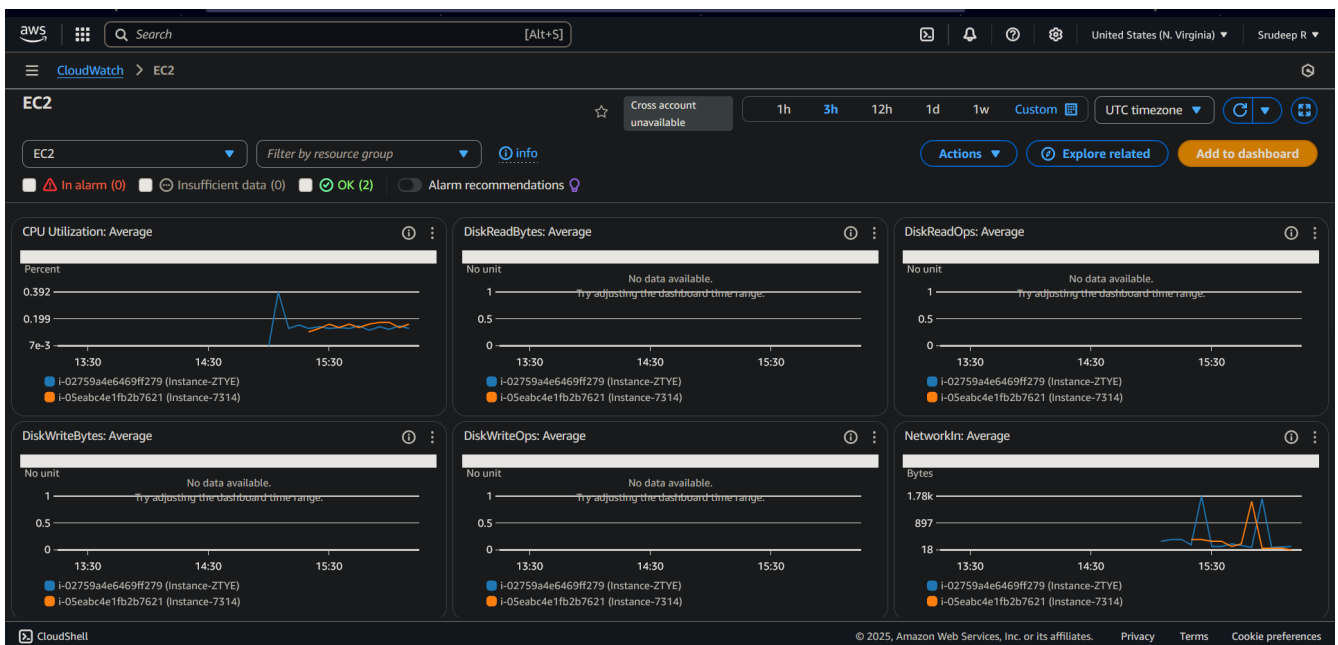
- Included CPU Utilization for both EC2 instances.
- Displayed alarm status on the dashboard.
- Real-time visualization for effective monitoring.

Screenshots

CloudWatch Dashboard



CPU Utilization Widget



⚠ Alarm Creation

aws

Search

[Alt+S]

United States (N. Virginia)

Srudeep R

CloudWatch

Alarms

CloudWatch

Alarms (2)

Hide Auto Scaling alarms

Clear selection

Create composite alarm

Actions

Create alarm

Search

Alarm state: Any

Alarm type: Any

Actions status: Any

< 1 >

Name	State	Last state update (UTC)	Conditions	Actions
Instance-7314	OK	2025-07-17 16:14:27	CPUUtilization > 70 for 2 datapoints within 10 minutes	Actions enabled Warnin
Instance-ZTYE	OK	2025-07-17 16:04:51	CPUUtilization > 70 for 2 datapoints within 15 minutes	Actions enabled Warnin

© 2025 Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

✉ Email Confirmation

Proton Mail

New message

Inbox 14

Drafts

Sent

Starred

More

Views

Newsletters

Folders

Labels

Get more storage 1/4

Complete this checklist within 18 days to double your storage for free.

3.31 MB / 500.00 MB

5.0.71.7

AWS Notification - Subscription Confirmation

From AWS Notifications <no-reply@sns.amazonaws.com>

To Learn-ZTYE@proton.me

9:31 PM

You have chosen to subscribe to the topic:
arn:aws:sns:us-east-1:154997152276:Task_2

To confirm this subscription, click or visit the link below (If this was in error no action is necessary):
[Confirm subscription](#)

Please do not reply directly to this email. If you wish to remove yourself from receiving all future SNS subscription confirmation requests please send an email to [sns-opt-out](#)



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