Create an instance and Cloudwatch to trigger an alarm and shutdown the instance.

1. Log in to AWS Management Console

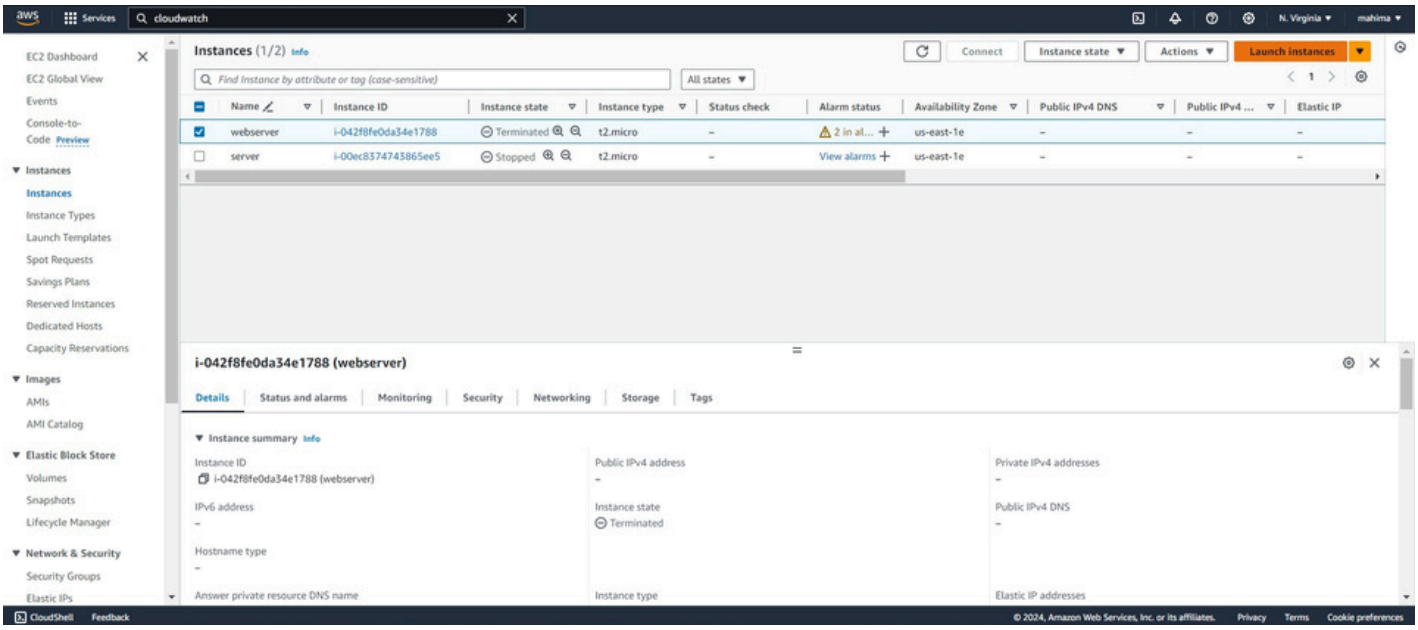
- Go to the AWS Management Console.
- Sign in with your credentials.

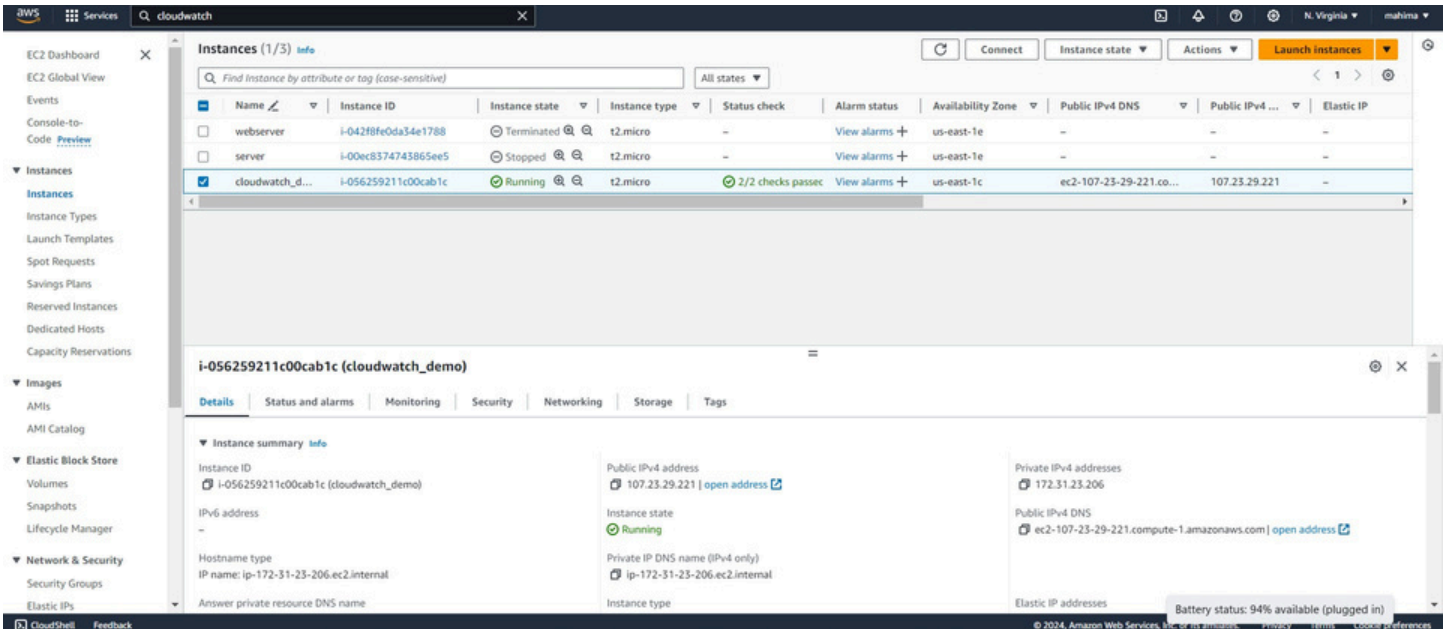
. Navigate to EC2

- In the AWS Management Console, type EC2 in the search bar and select it from the list of services.

. Launch an Instance

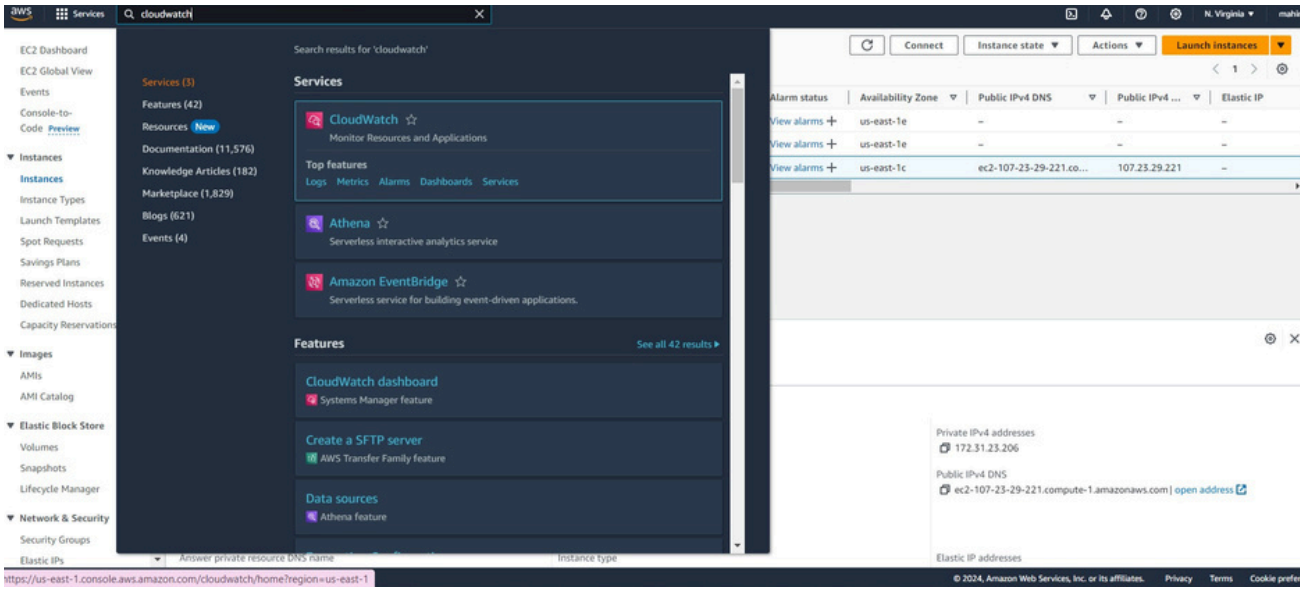
- In the EC2 Dashboard, click on the Launch Instance button.





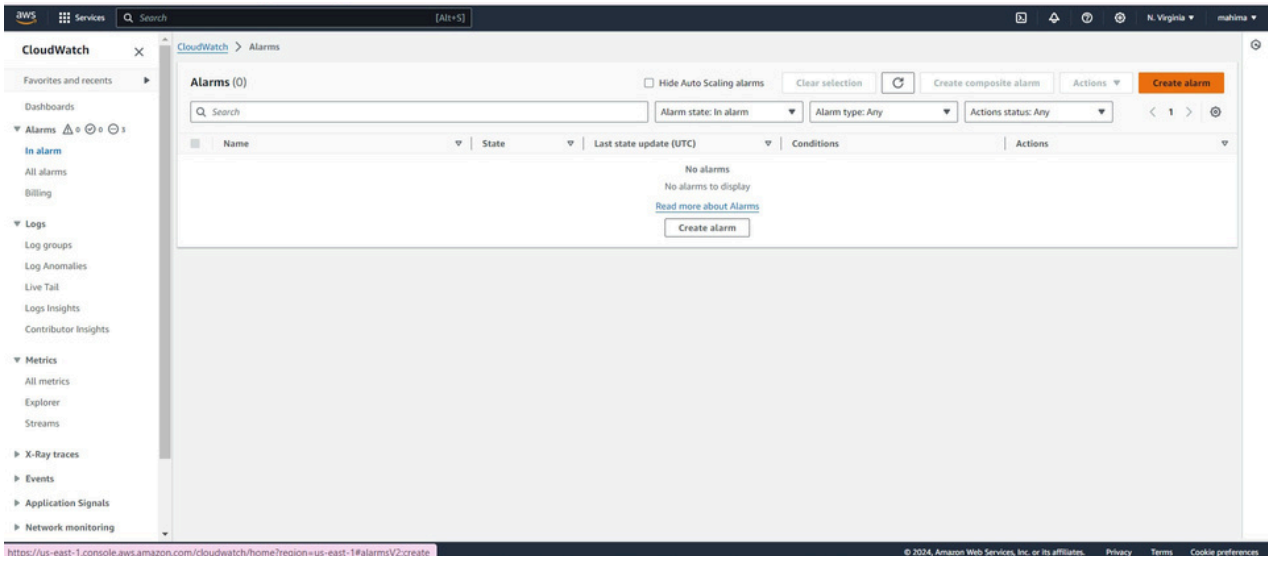
2. Navigate to CloudWatch

- **In the AWS Management Console, type CloudWatch in the search bar and select it from the list of services.**



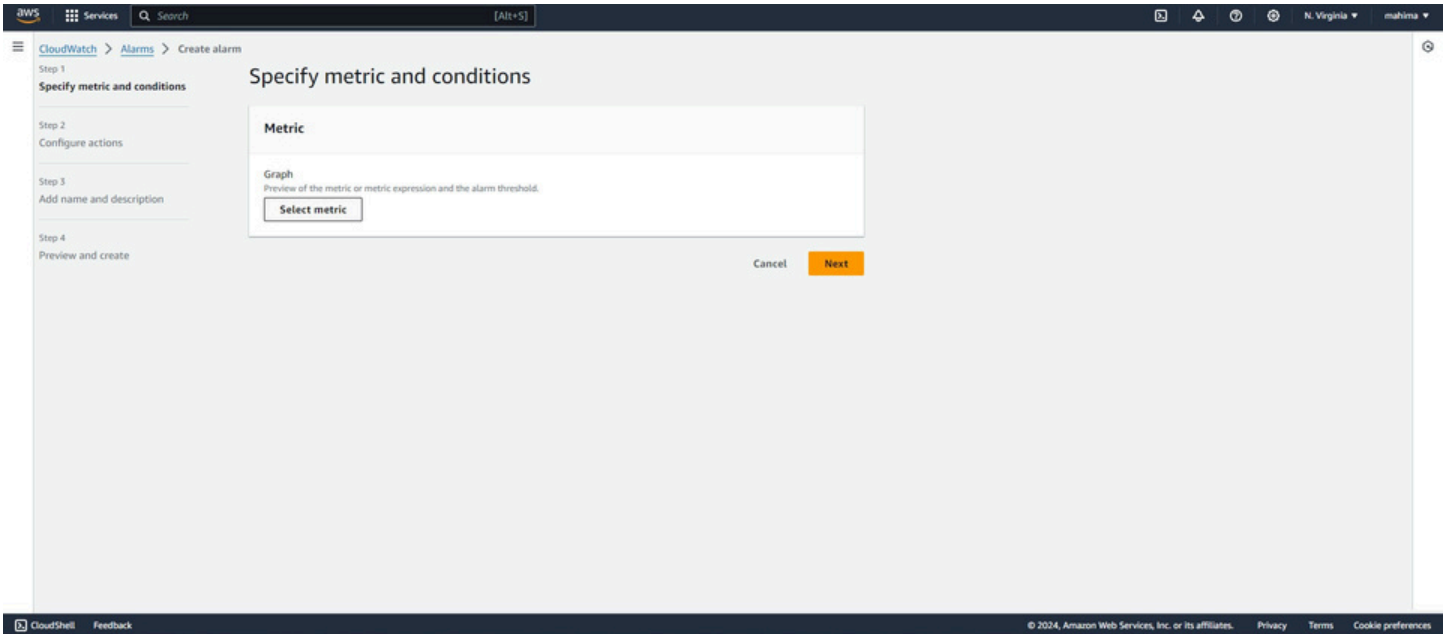
3. Create a New Alarm

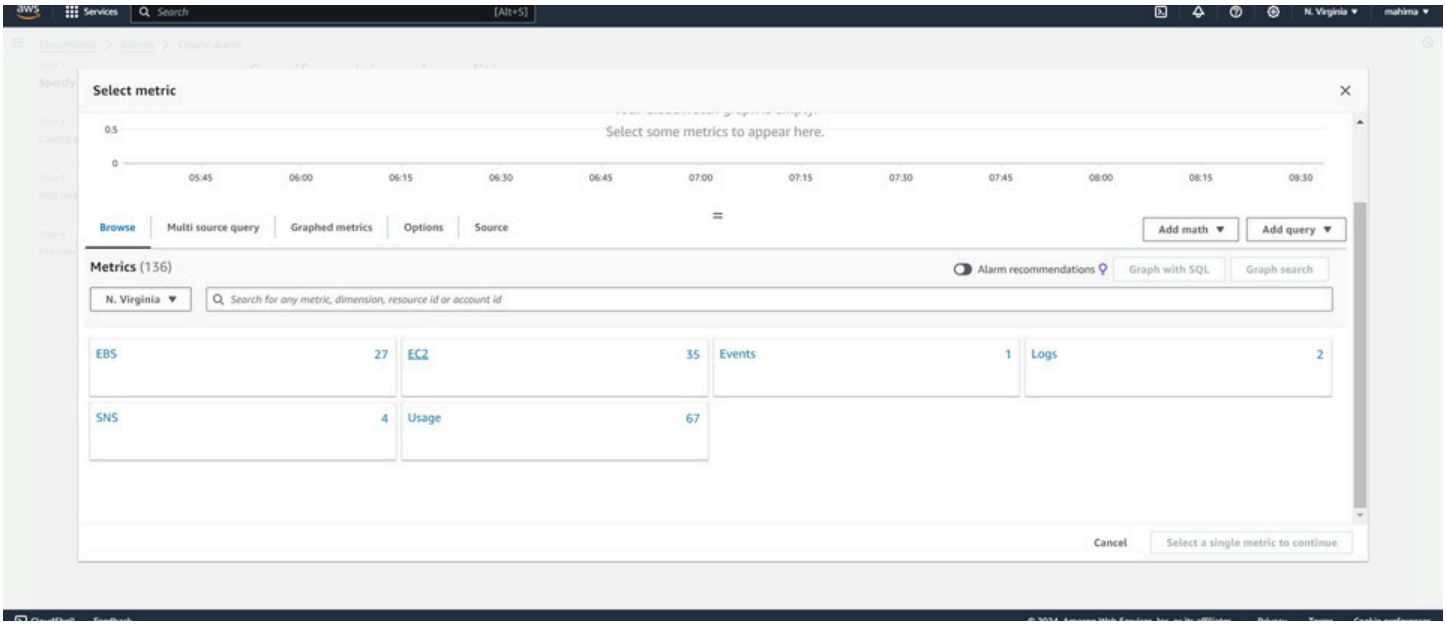
- **In the CloudWatch dashboard, click on Alarms in the left-hand navigation pane.**
- **Click on the Create Alarm button.**

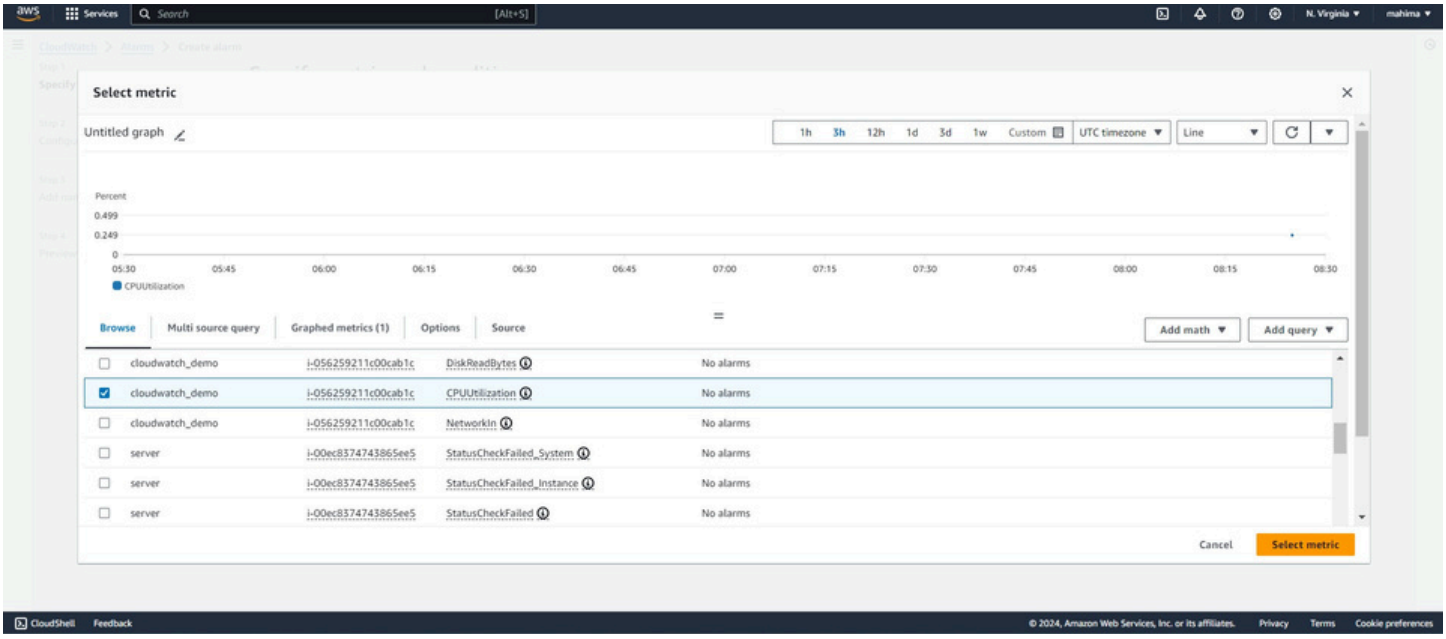


4. Select a Metric

- **Click on the Select metric button.**
- **Choose a metric category (e.g., EC2, RDS, Lambda).**
- **Browse or search for the specific metric you want to monitor (e.g., CPU Utilization for an EC2 instance).**
- **Select the desired metric and click Select metric.**

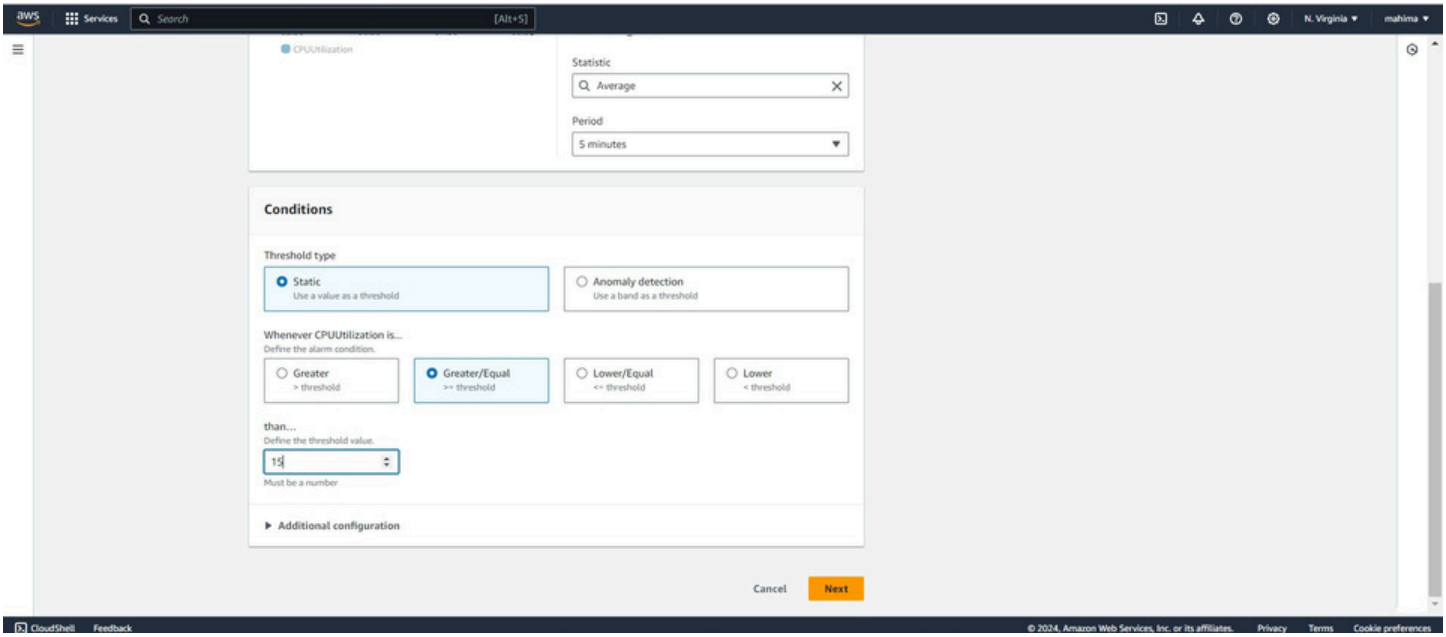






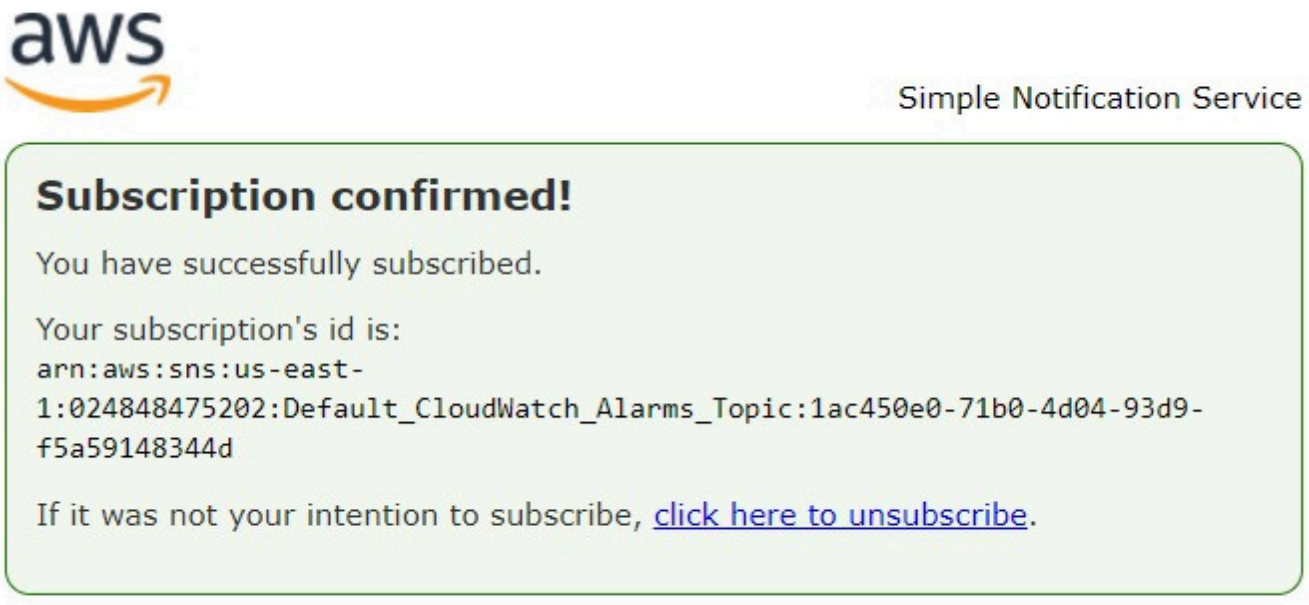
5. Specify the Alarm Conditions

- **Define the Threshold type:**
  - **Static: Specify a fixed threshold value.**
  - **Anomaly detection: AWS will use machine learning to create dynamic thresholds.**
- **Set the Threshold value and specify whether the condition should be Greater/Equal to or Less/Equal to the threshold.**
- **Define the Period (the length of time associated with the metric data).**
- **Set the Datapoints to Alarm and Evaluation Periods to determine how many times the metric must breach the threshold before the alarm triggers.**

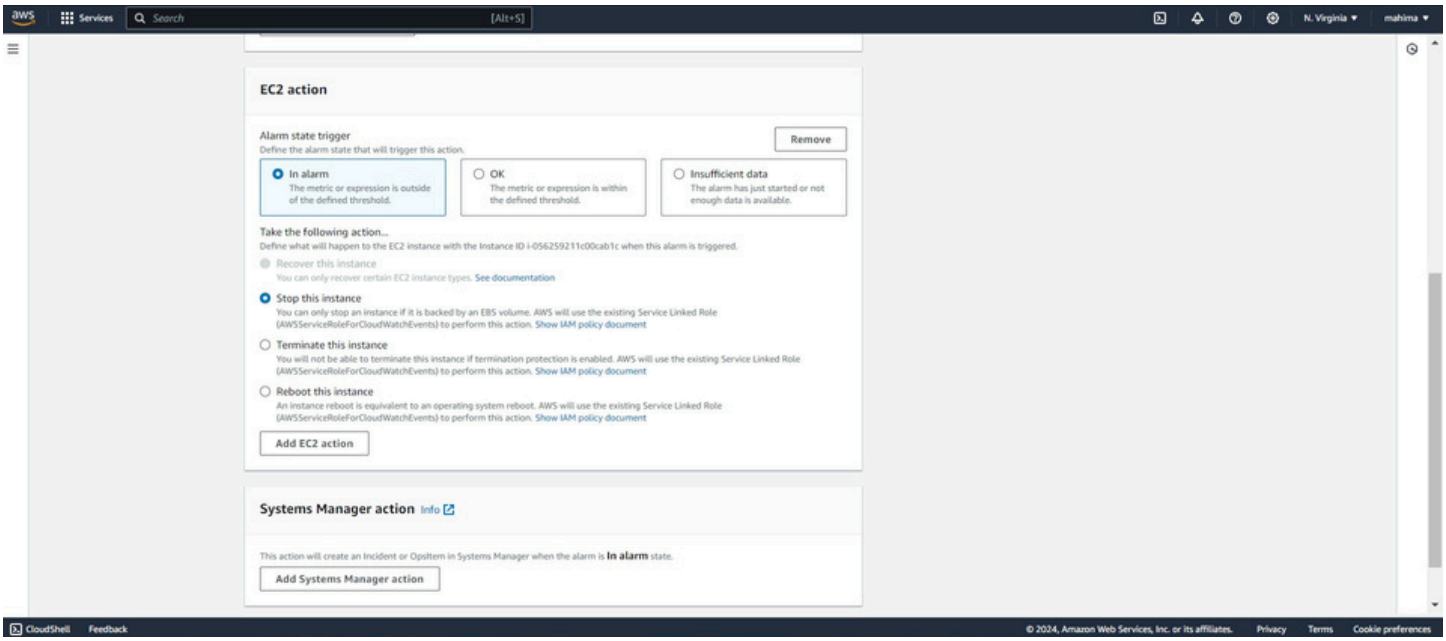


6. Configure Actions

- **Choose the actions to take when the alarm state is triggered:**
  - **Send a notification to an SNS topic: Select or create an SNS topic and add the necessary recipients (e.g., email, SMS).**

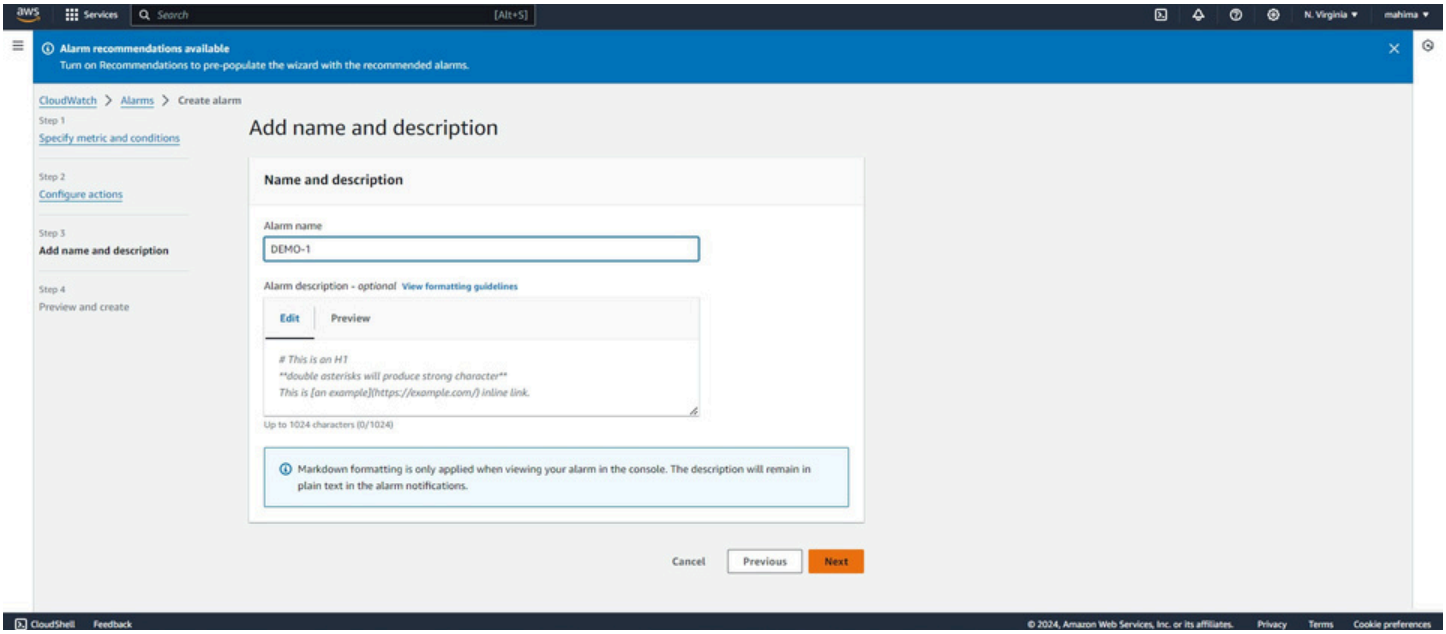


  - **Auto-scaling actions: If you're using auto-scaling, select the appropriate auto-scaling group and action.**
  - **EC2 action: Stop, terminate, reboot, or recover an EC2 instance.**



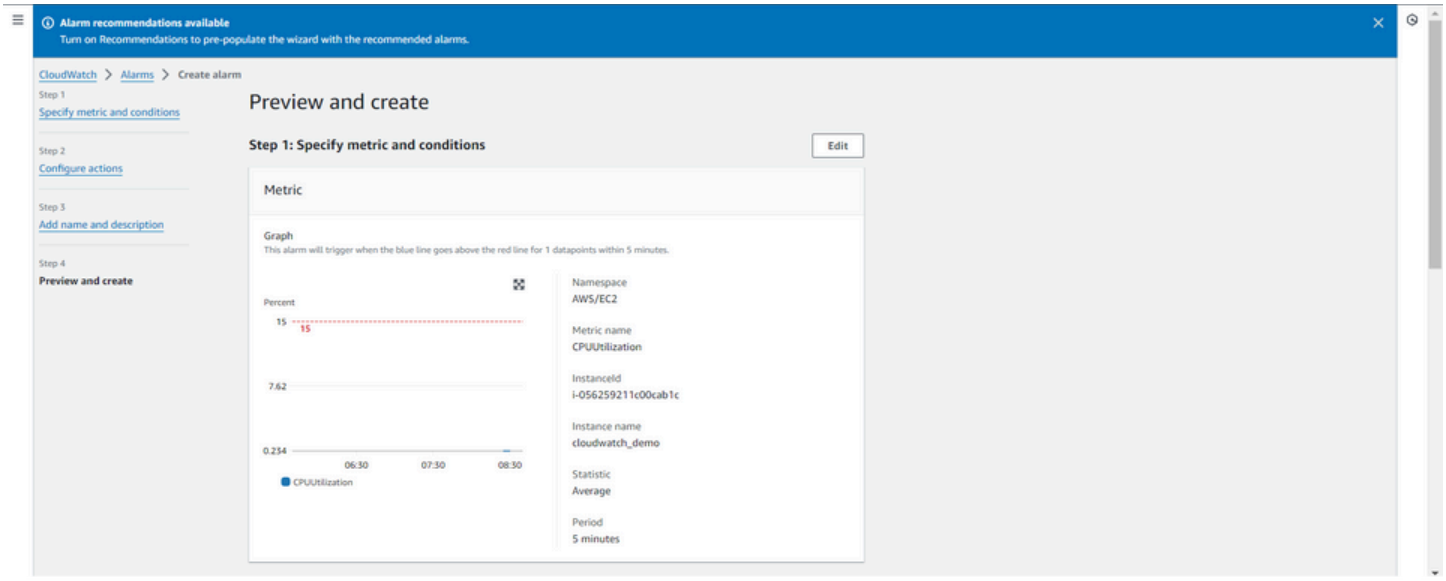
7. Add a Name and Description

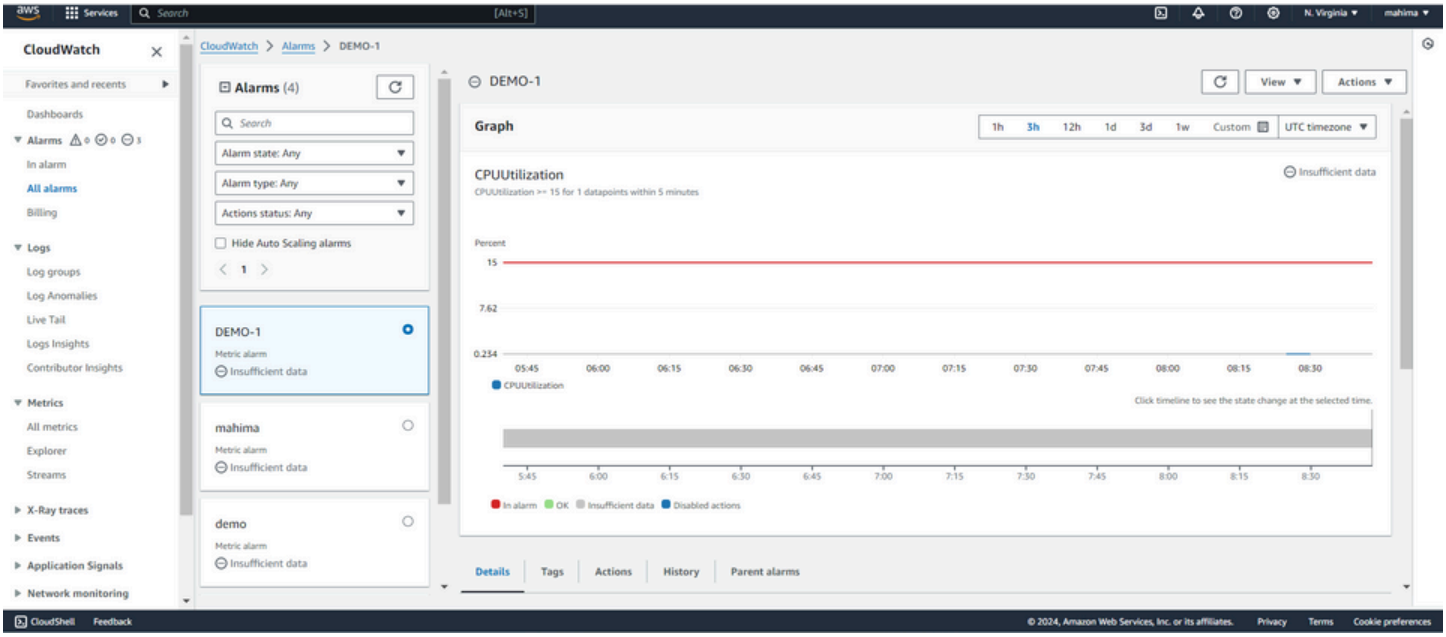
- **Provide a unique Name for the alarm.**
- **Optionally, add a Description to help identify the alarm's purpose.**



8. Review and Create

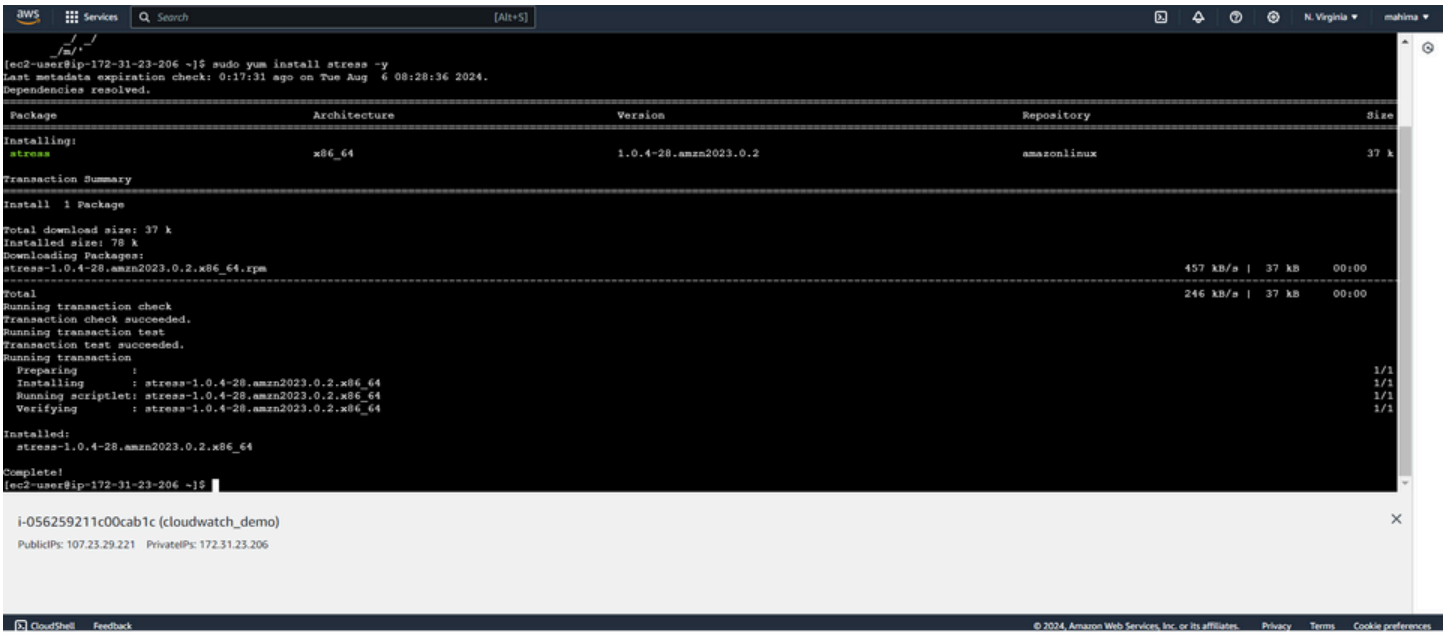
- **Review all the settings you have configured.**
- **Click the Create alarm button to finalize the creation.**

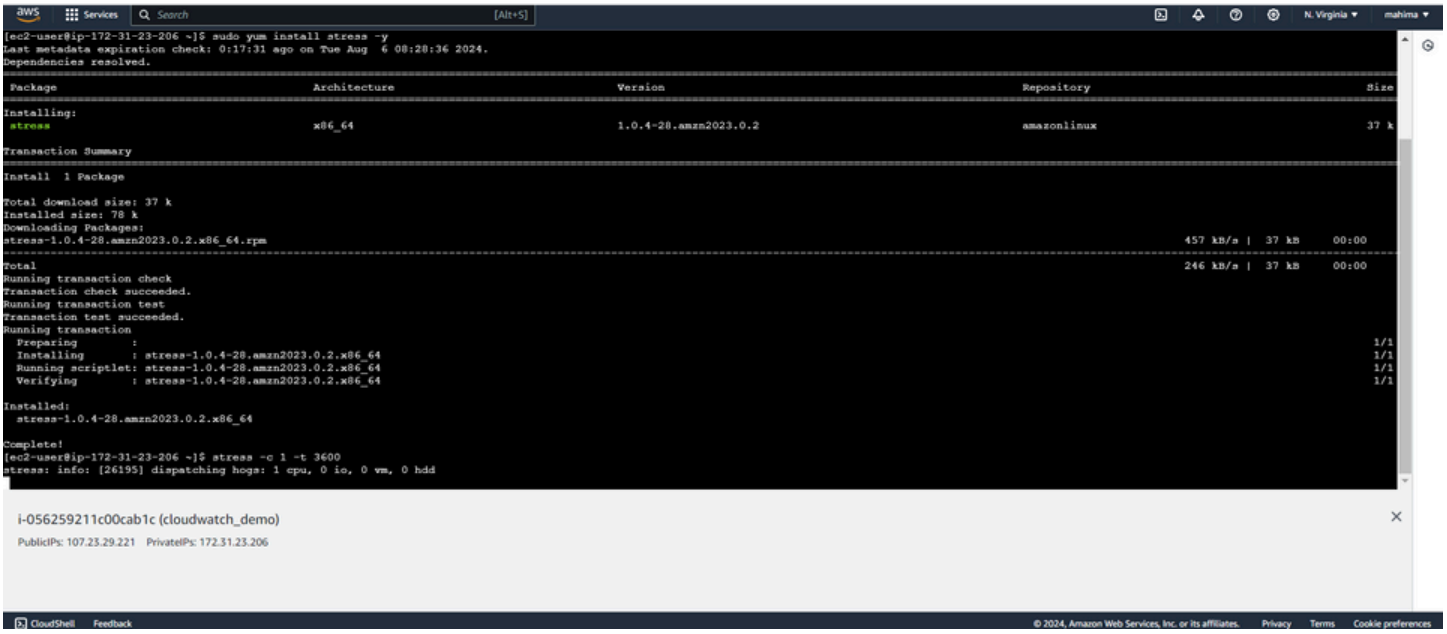




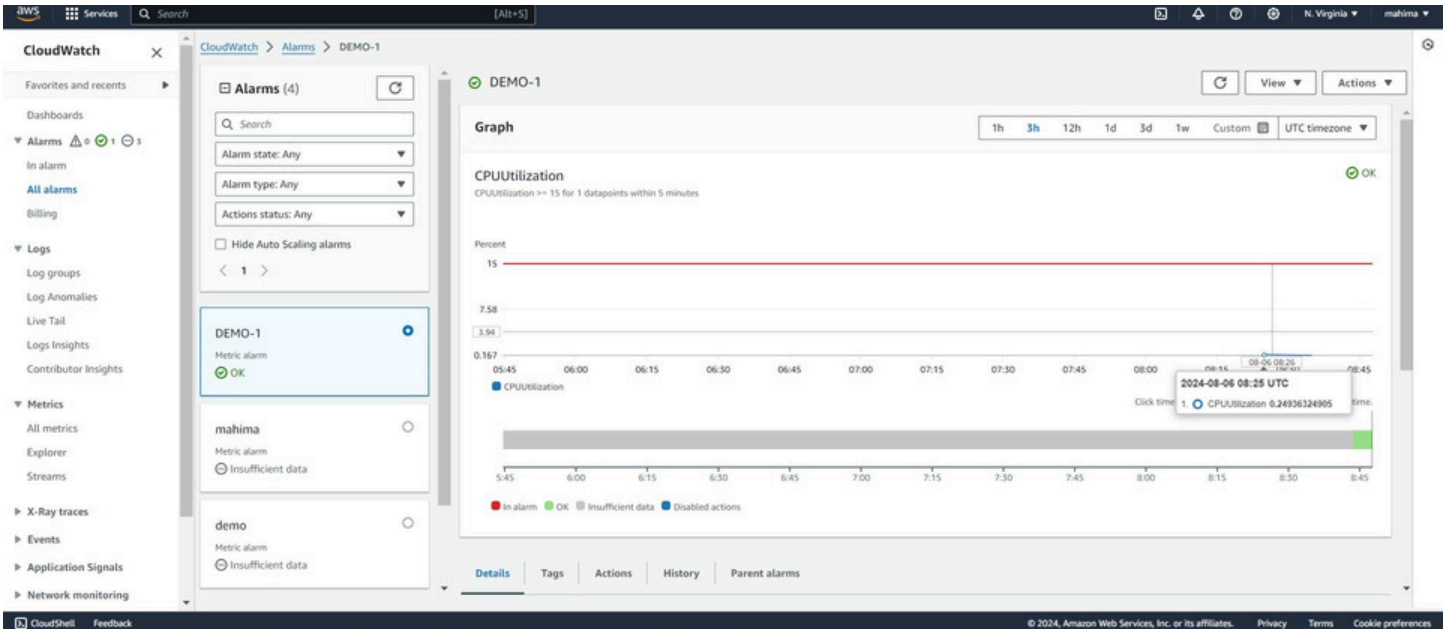
9.Install Stress Tool

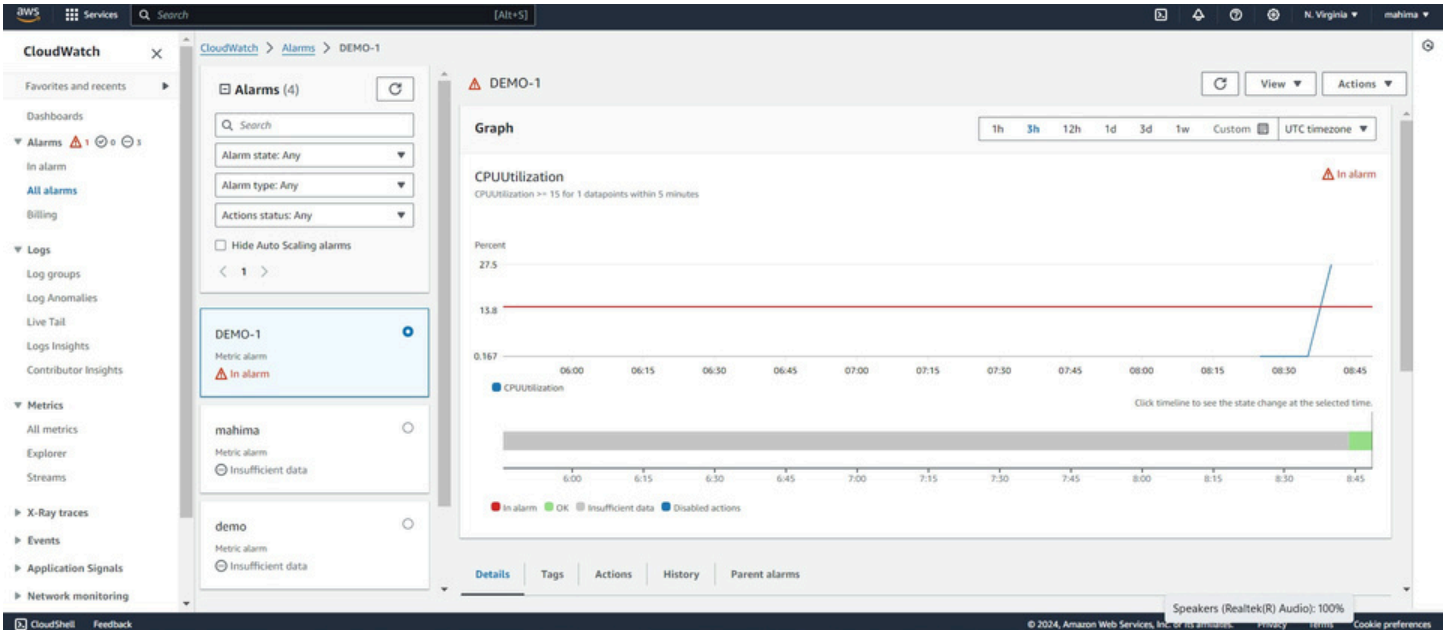
Once connected to the EC2 instance, install a stress tool like stress to create CPU load. For Amazon Linux 2, you can use:



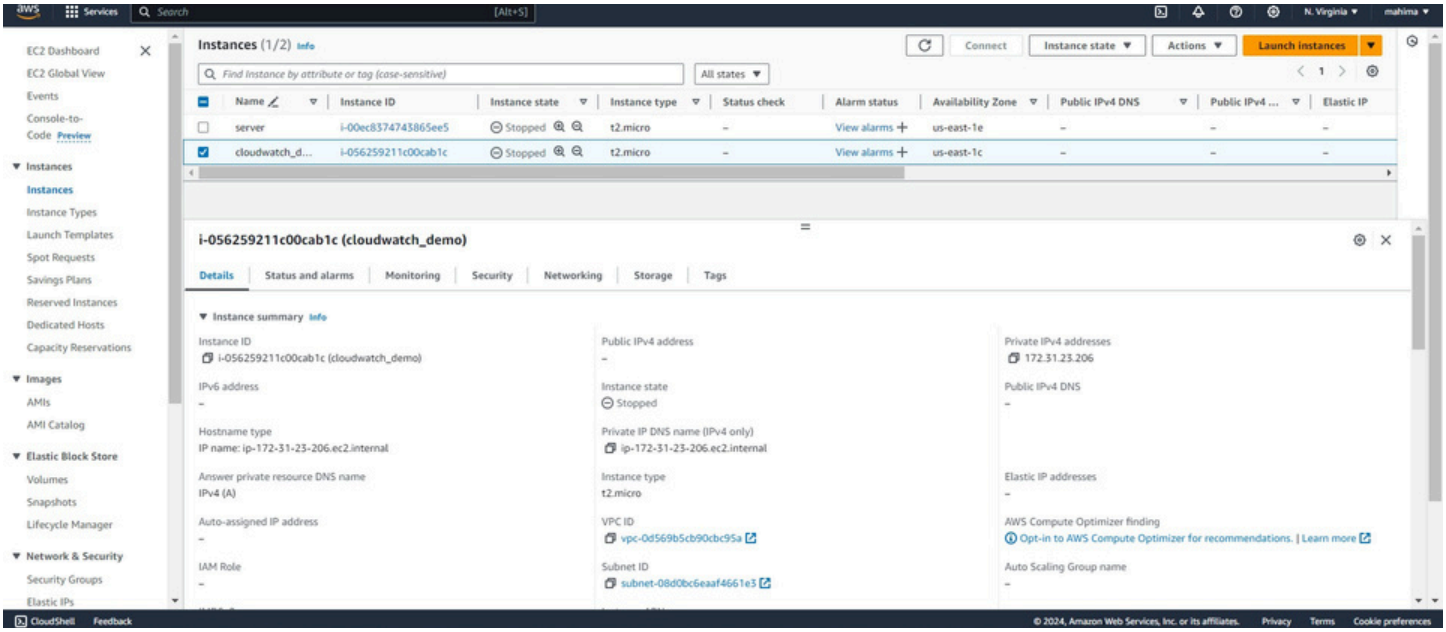


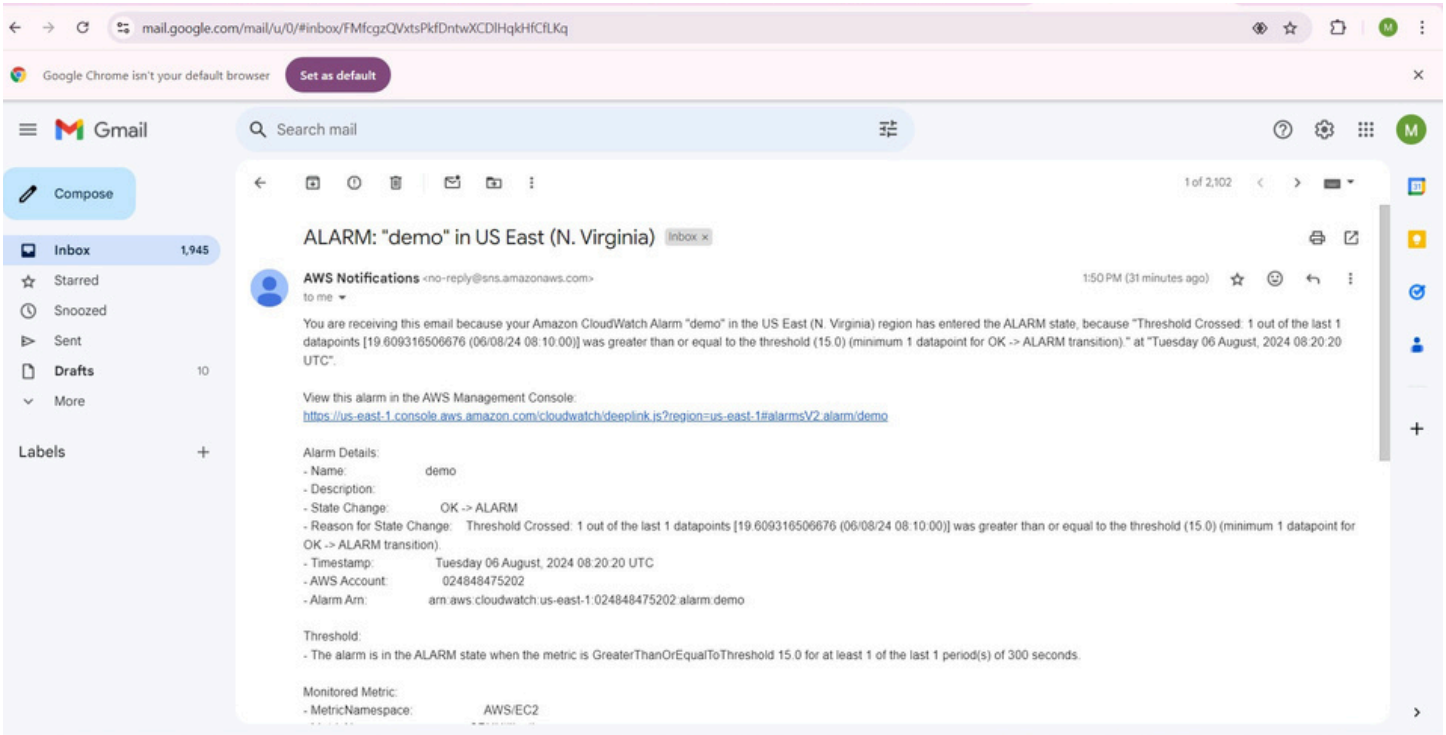
10.Variation in graph “ok” indicates the cpu utilization is within the limit and “in alarm” indicates that the threshold value is crossed.





11.The EC2 instance get stopped due to action taken by CLOUDWATCH.




mail.google.com/mail/u/0/#inbox/FMfcgzQVxtsPkfDntwXCDlHqkHfCfLKq
Google Chrome isn't your default browser
Set as default
Gmail
Search mail
Compose
Inbox 1,945
Starred
Snoozed
Sent
Drafts 10
More
Labels
1 of 2,102
ALARM: "demo" in US East (N. Virginia)
Inbox ×
AWS Notifications <no-reply@sns.amazonaws.com>
to me
1:50 PM (31 minutes ago)
You are receiving this email because your Amazon CloudWatch Alarm "demo" in the US East (N. Virginia) region has entered the ALARM state, because "Threshold Crossed: 1 out of the last 1 datapoints [19.609316506676 (06/08/24 08:10:00)] was greater than or equal to the threshold (15.0) (minimum 1 datapoint for OK -> ALARM transition)." at "Tuesday 06 August, 2024 08:20:20 UTC".
View this alarm in the AWS Management Console:
https://us-east-1.console.aws.amazon.com/cloudwatch/deeplink.js?region=us-east-1#alarmsV2:alarm/demo
Alarm Details:
- Name: demo
- Description:
- State Change: OK -> ALARM
- Reason for State Change: Threshold Crossed: 1 out of the last 1 datapoints [19.609316506676 (06/08/24 08:10:00)] was greater than or equal to the threshold (15.0) (minimum 1 datapoint for OK -> ALARM transition).
- Timestamp: Tuesday 06 August, 2024 08:20:20 UTC
- AWS Account: 024848475202
- Alarm Arn: arn:aws:cloudwatch:us-east-1:024848475202:alarm:demo
Threshold:
- The alarm is in the ALARM state when the metric is GreaterThanOrEqualToThreshold 15.0 for at least 1 of the last 1 period(s) of 300 seconds.
Monitored Metric:
- MetricNamespace: AWS/EC2