Lesson 09 Demo 01

Automating EC2 Instance Shutdown with CloudWatch Alarm

Objective: To create a CloudWatch alarm to automatically stop an instance based on CPU utilization

Tools required: AWS Management Console

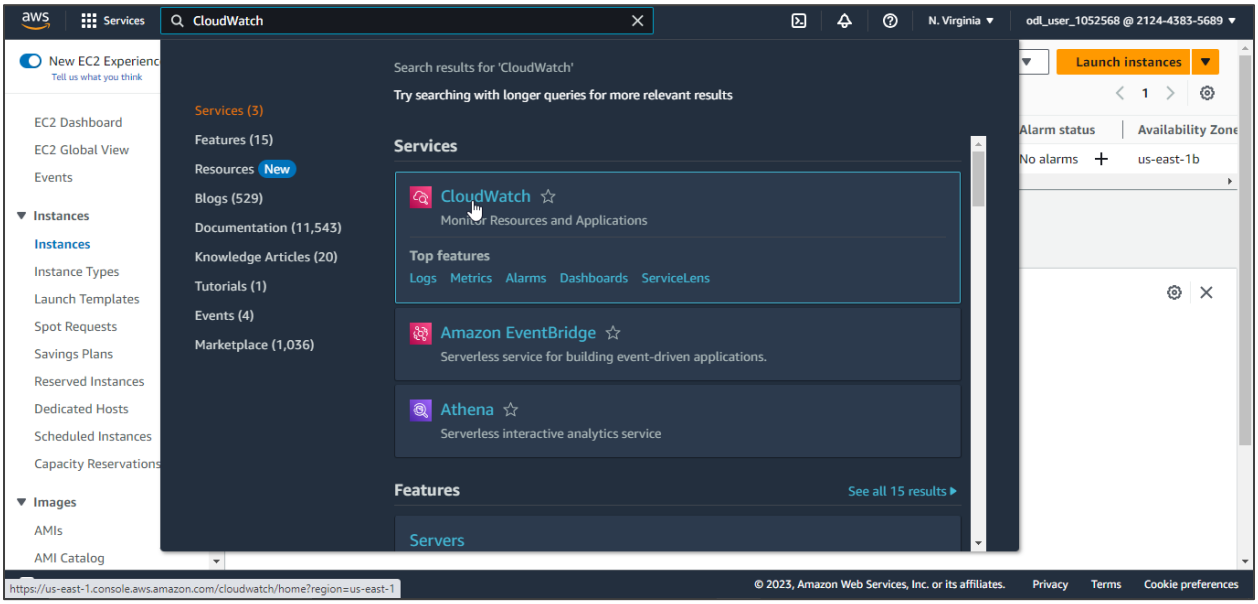
Prerequisites: An active EC2 instance

Steps to be followed:

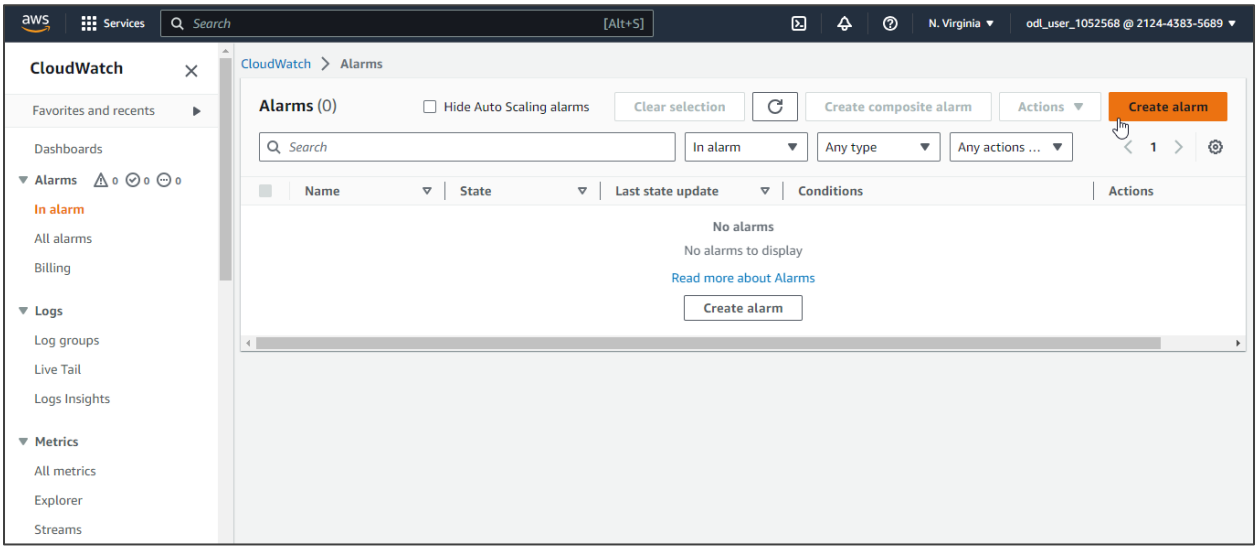
1. Create a CloudWatch alarm

Step 1: Create a CloudWatch alarm

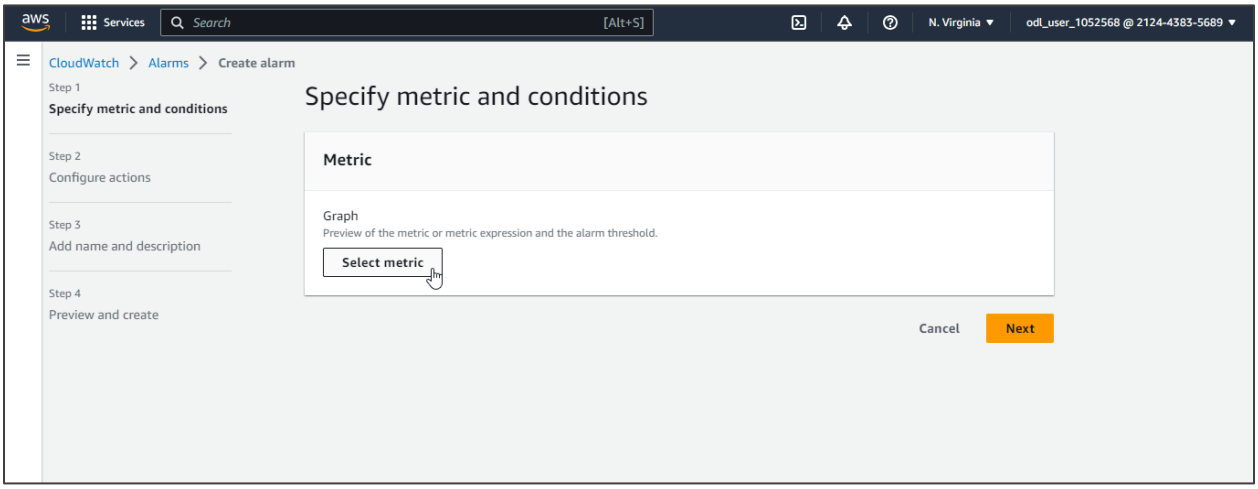
1.1 Open the AWS Management Console, and search for and click **CloudWatch**



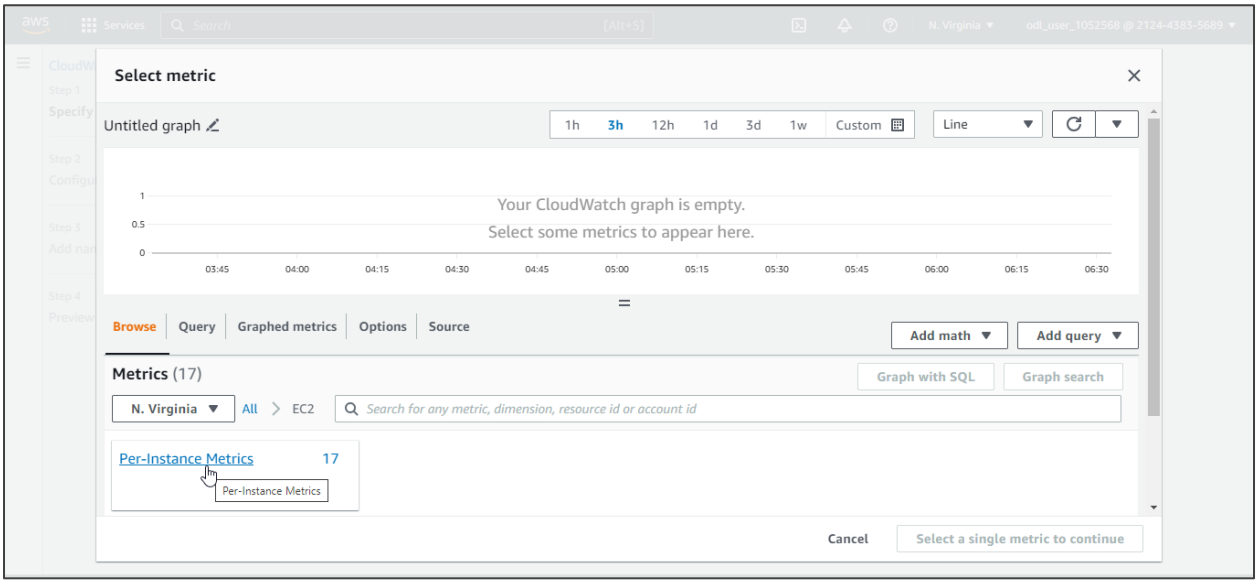
1.2 In the CloudWatch menu, click **Create alarm**



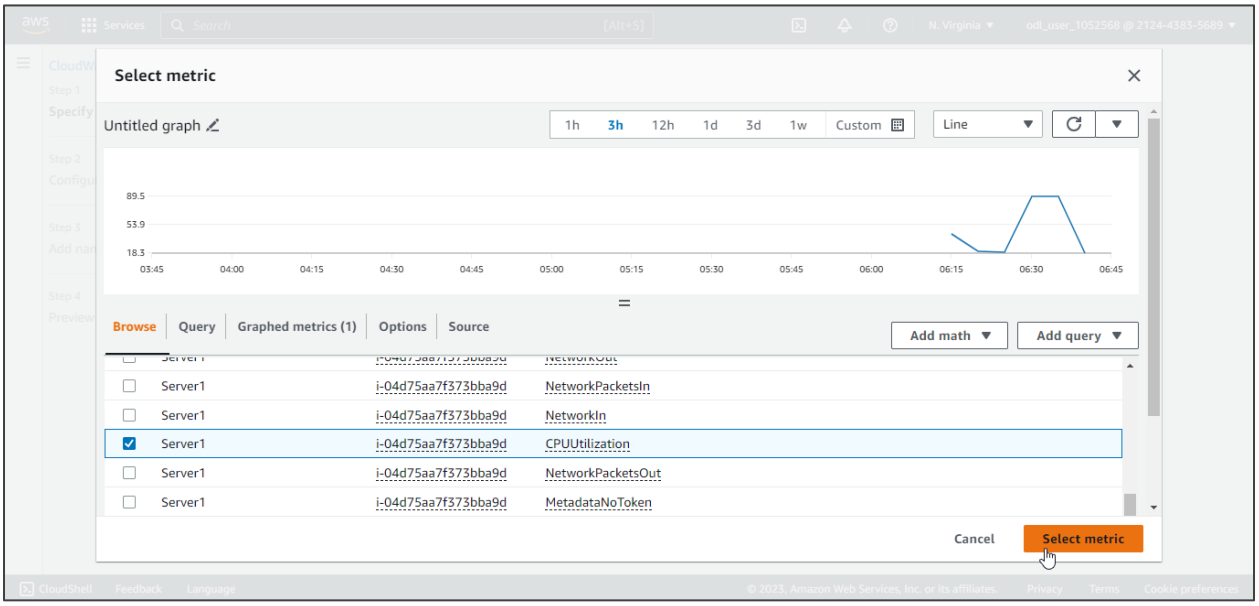
1.3 Click on **Select metric**



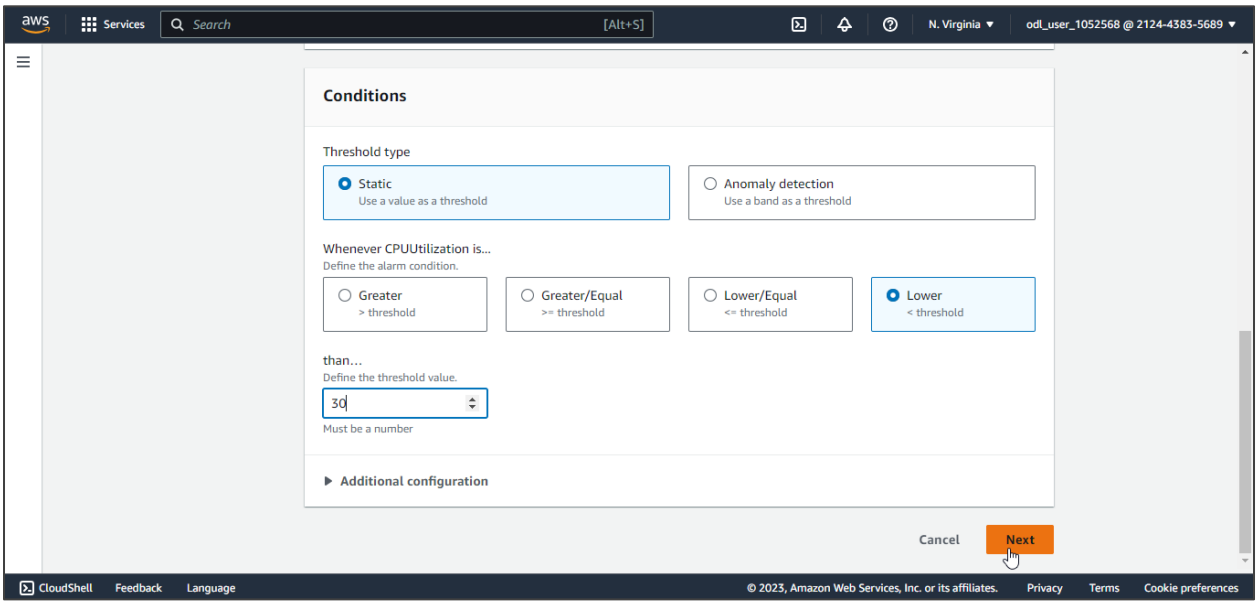
1.4 Choose **EC2** and select **Per-Instance Metrics**



1.5 In the Metric table, select the **CPUUtilization** of your instance and click **Select metric**

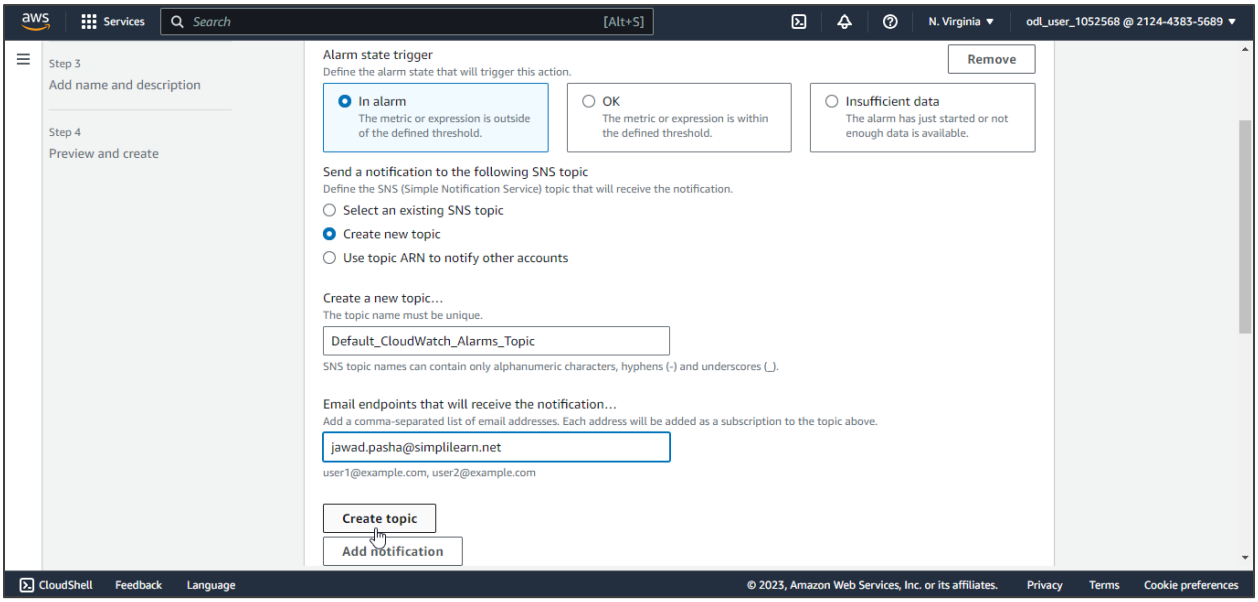


1.6 Select **Static** for the Threshold type, set **Lower** for CPUUtilization, and enter **30** as the threshold value. Now, click **Next**.

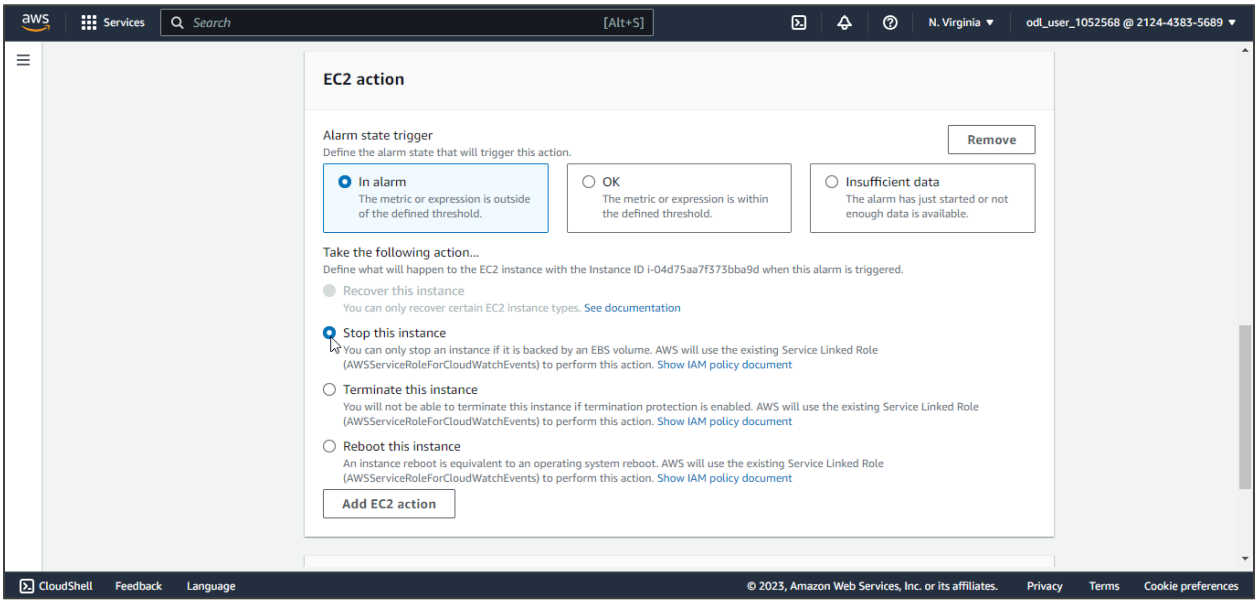


1.7 Configure the **Alarm state trigger** as follows:

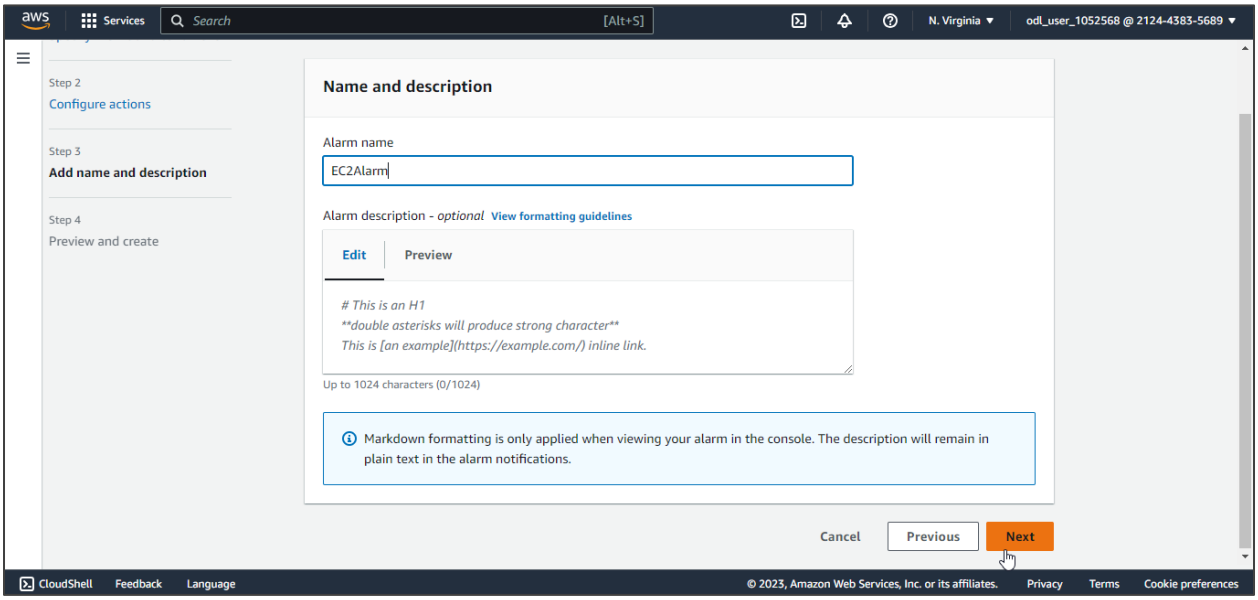
- Select **In alarm** and create a new topic
- Provide a topic name and your email address, and click **Create topic**



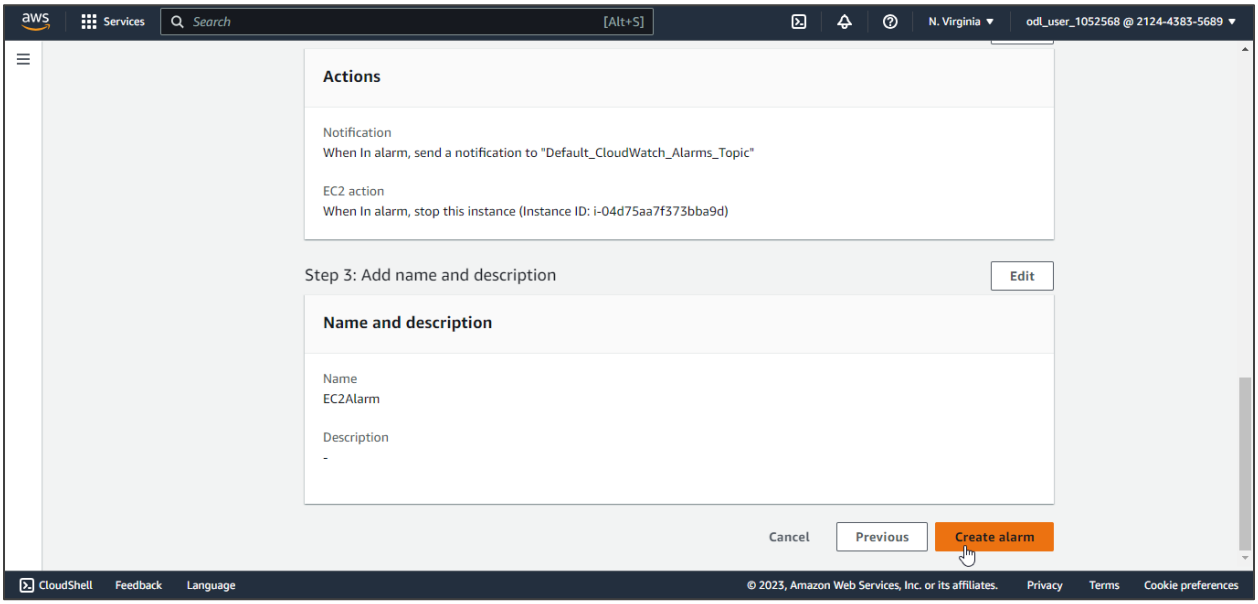
1.8 Under EC2 action, choose to **Stop this instance**

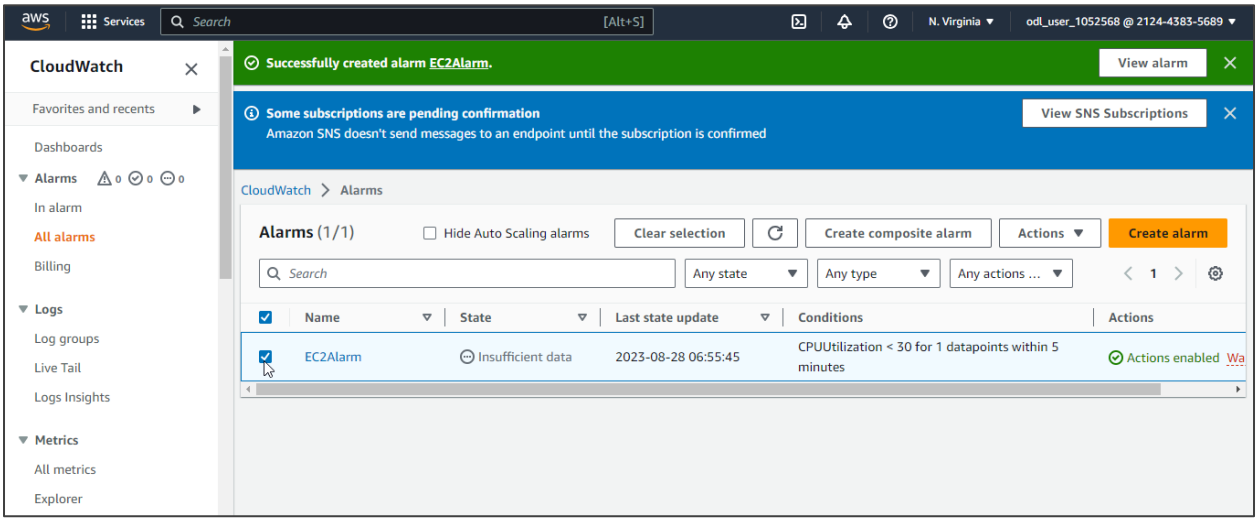


1.9 In the **Add name and description** section, assign a name to your alarm, and click **Next**



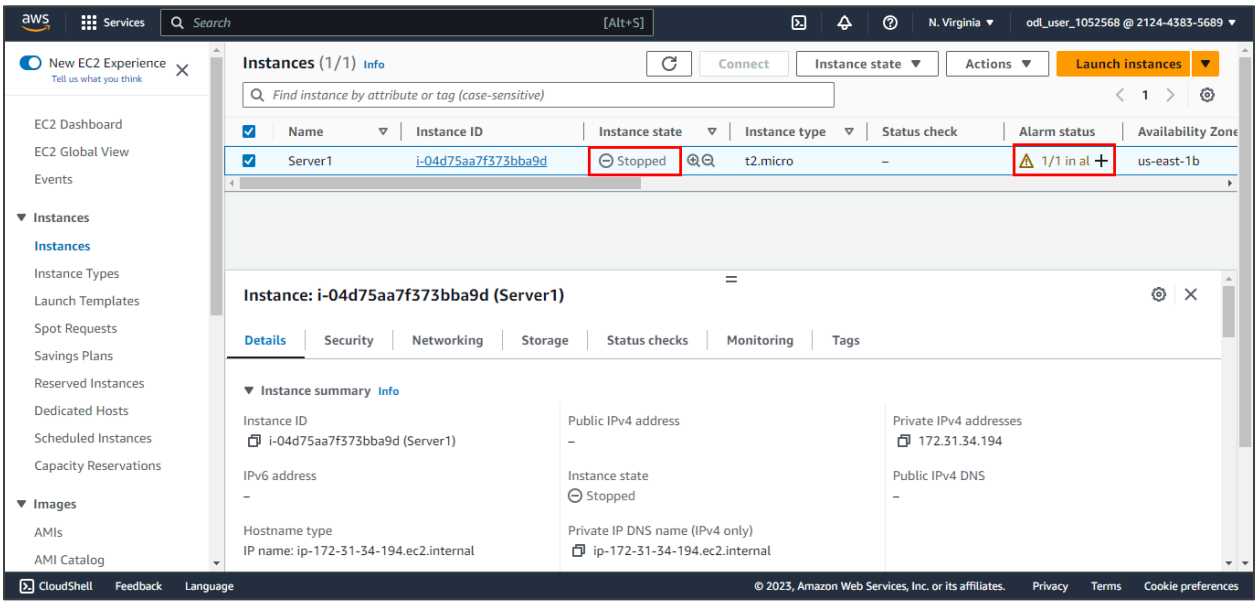
1.10 Click on **Create alarm**





Once the alarm has been created, it will be visible on the Alarms dashboard.

1.11 Navigate to the EC2 dashboard to check the instance state and alarm status. After a while, you will notice that the alarm triggers, causing the instance to stop.



By following these steps, you have successfully created a CloudWatch alarm that monitors the CPU utilization of your EC2 instance. When the CPU utilization falls below the specified threshold of 30%, the alarm triggers and sends a notification to the specified email address.