

**Problem Statement:**

You work for XYZ Corporation. To maintain the security of the AWS account and

the resources you have been asked to implement a solution that can help easily

recognize and monitor the different users. Also, you will be monitoring the

machines created by these users for any errors or misconfigurations.

**Tasks To Be Performed:**

1. Create a dashboard which lets you check the CPU utilization and

networking for a particular EC2 instance.

And

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**Tasks To Be Performed:**

1. Create a CloudWatch billing alarm which goes off when the estimated

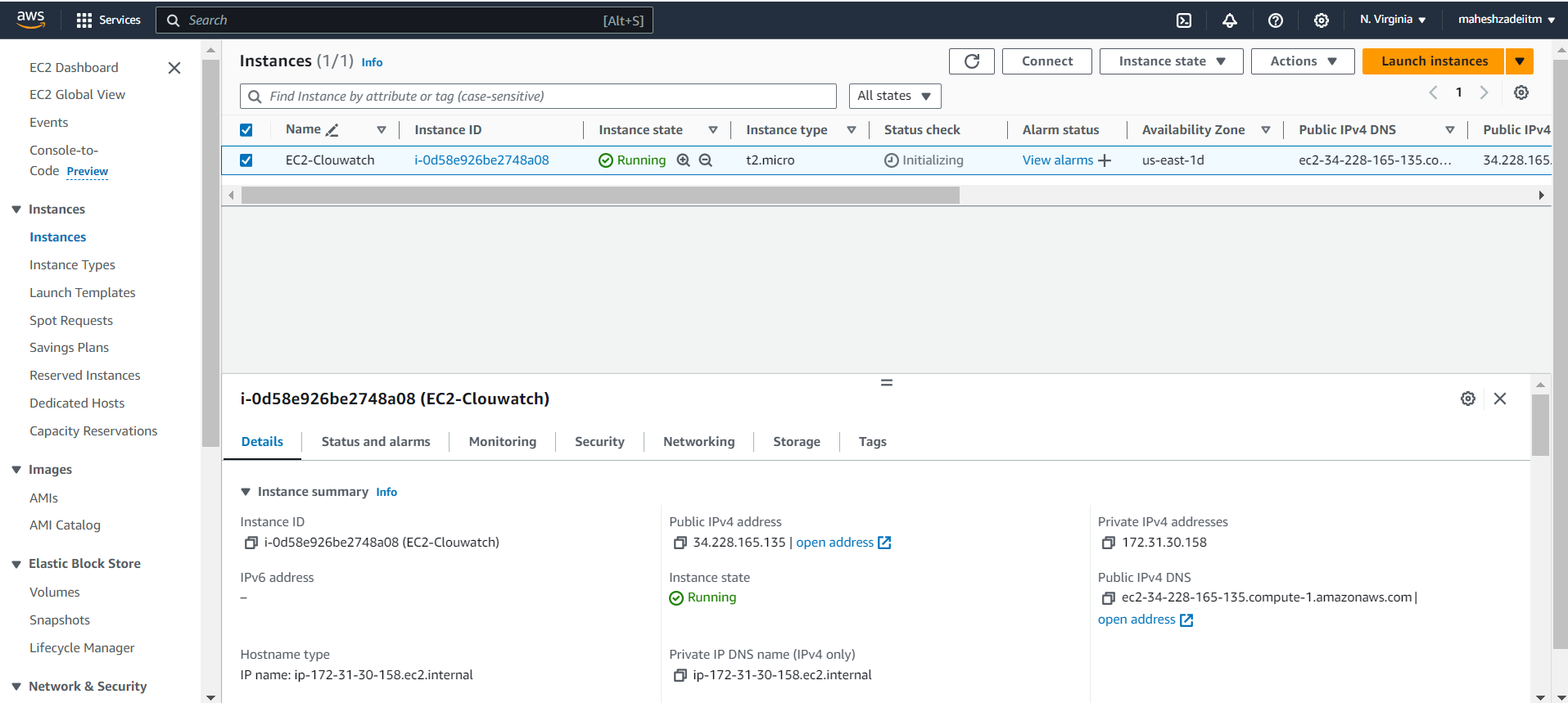
charges go above $500.

2. Create a CloudWatch alarm which goes off to an Alarm state when the

CPU utilization of an EC2 instance goes above 65%. Also add an SNS

topic so that it notifies the person when the threshold is crossed.

For task1, we need to create a CloudWatch dashboard for an EC2 instance. Let’s create it first.



Instance is ready. Let’s create a cloudwatch dashboard

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Click on create dashboard

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Choose EC2

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Select metrics related to CPU utilization and Network and create widget

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Widget is added to the dashboard.

Let’s move to the next task - Alarms

Let’s first enable billing alerts in order to create billing alarms.

Go to Billing and Cost Management 🡪 Billing Preferences.

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**Enable receive billing alerts and update.**

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**Go to cloudwatch dashboard and click on create alarms**

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**Select matrix**

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**Search for billing and select Total Estimated Charge**

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**Select USD and click on Select metric.**

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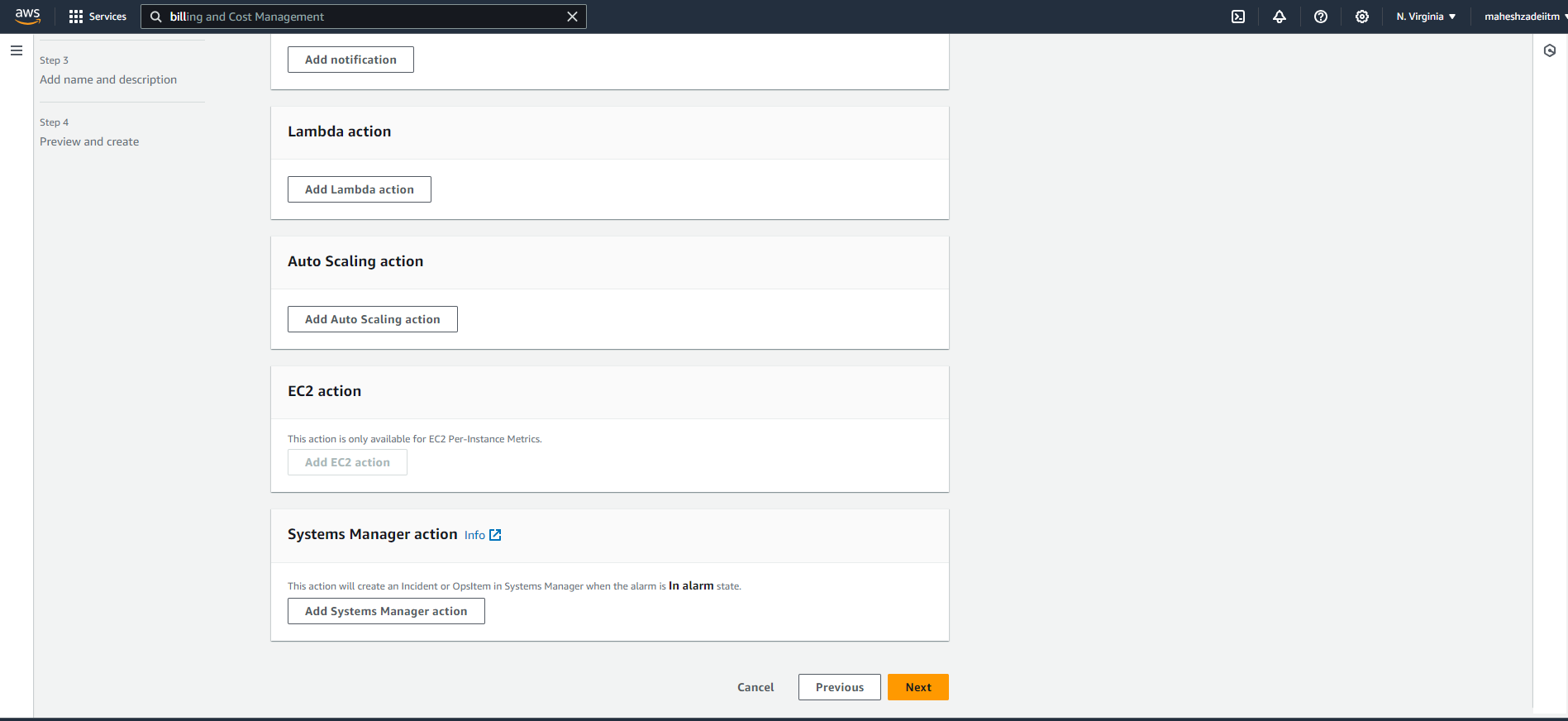
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**Click on Next**

**Remove notifications and click on Next**

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**Give the Name**

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**Alarm is created**

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**Lets create next alarm for CPU Utilization above 65% with an SNS topic.**

**Go to Create Alarms 🡪 Metric 🡪 EC2 🡪 Per-Instance Metrics 🡪**

**select CPU Utilization for the instance**

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**Enter threshold value 65 and click Next**

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**Create a new SNS topic. It will send mail once the CPU Utilization reaches 65%.**

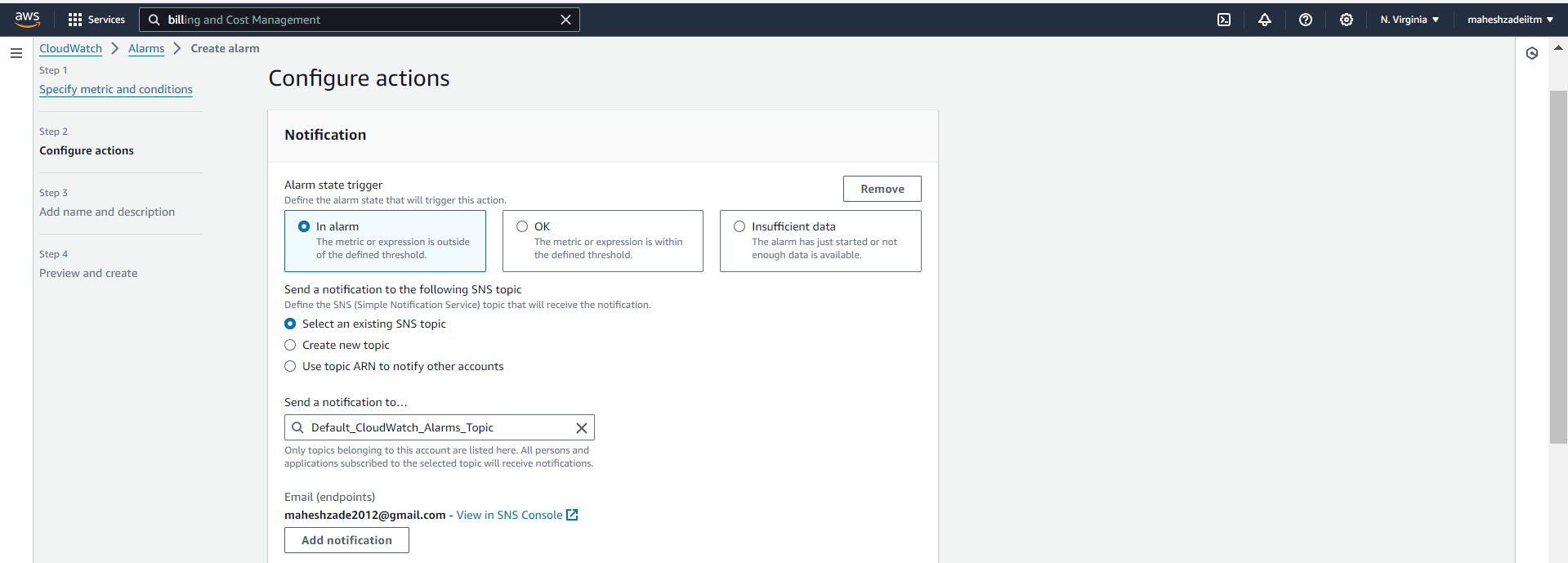
**Provide a mail ID**

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**Keep the remaining settings as it is and click on Next**

**Lick on create topic**

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**Give it a name and click on Next**

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**Review the settings and Create alarm**

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**Alarm is created**

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**Alarm is created. Let’s go and subscribe this SNS Topic**

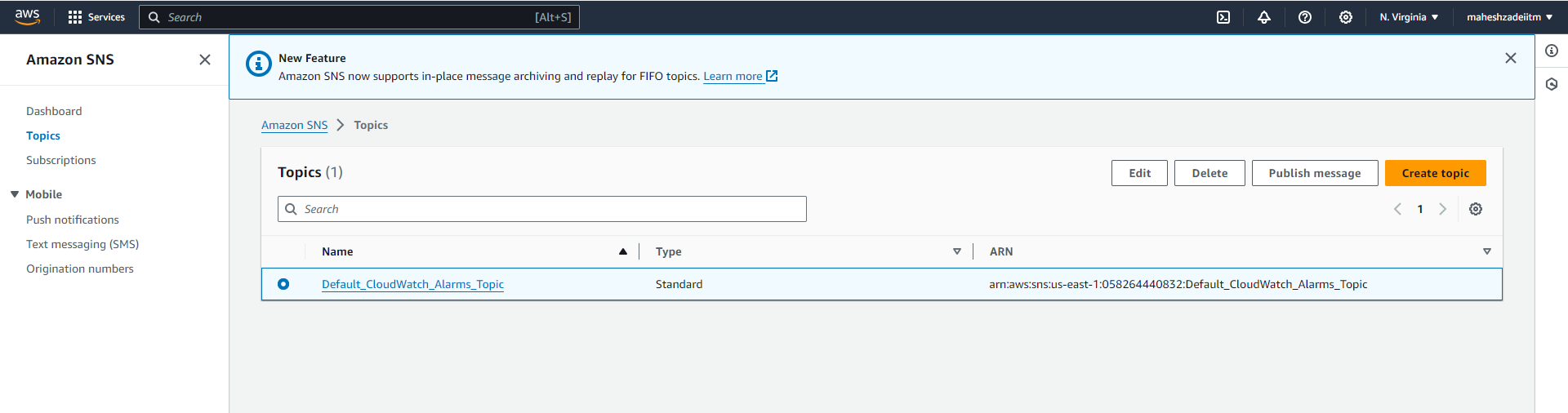
**Open your mail and accept this subscription.**

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It is reflected in IAM Dashboard.

Whenever the CPU Utilization crosses 65%, it notifies the subscribed user by sending an e-mail.

This completes our assignment.

Thank you