1. Create a CloudWatch Billing Alarm

Step 1: Enable Billing Alerts

1. **Login to AWS Management Console**.

2. Go to **Billing Dashboard**.

3. In the left navigation pane, click on **Preferences**.

4. Check the box for **Receive Billing Alerts**.

5. Click on **Save preferences**.

Step 2: Create the Billing Alarm

1. Navigate to **CloudWatch**.

2. In the left navigation pane, click on **Alarms**.

3. Click on **Create alarm**.

4. Under **Select metric**, click on **Billing**.

5. Select **Billing Metric** and then choose **EstimatedCharges**.

6. Click on **Select metric**.

Step 3: Configure the Alarm

1. Set the **Period** to 1 month.

2. Set the **Condition** to Static and Greater than and enter 500 as the threshold.

3. Click on **Next**.

Step 4: Configure Actions

1. You will need to create an SNS topic if you don't have one already. Click on **Create new topic**.

2. Enter a **Topic name** (e.g., BillingAlerts).

3. Enter an email address in the **Email endpoints that should receive notifications** field.

4. Click on **Create topic**.

5. Check the box to send notifications to the newly created topic.

6. Click on **Next**.

Step 5: Add Name and Description

1. Enter a name for the alarm (e.g., BillingAlarmAbove500).

2. Optionally, add a description.

3. Click on **Create alarm**.

2. Create a CloudWatch Alarm for CPU Utilization

Step 1: Create the CPU Utilization Alarm

1. In CloudWatch, click on **Alarms** in the left navigation pane.

2. Click on **Create alarm**.

3. Under **Select metric**, click on **EC2** and then **Per-Instance Metrics**.

4. Find and select your specific EC2 instance.

5. Check the box for CPUUtilization.

6. Click on **Select metric**.

Step 2: Configure the Alarm

1. Set the **Period** to 5 minutes (or as per your requirement).

2. Set the **Condition** to Greater than and enter 65 as the threshold.

3. Click on **Next**.

Step 3: Configure Actions

1. If you already created an SNS topic for billing, you can use the same topic here. Otherwise, create a new SNS topic following the same steps as in the billing alarm.

2. Check the box to send notifications to the SNS topic.

3. Click on **Next**.

Step 4: Add Name and Description

1. Enter a name for the alarm (e.g., CPUUtilizationAbove65).

2. Optionally, add a description.

3. Click on **Create alarm**.

Summary

- **Created a CloudWatch billing alarm** that triggers when estimated charges exceed $500, sending notifications to an SNS topic.

- **Created a CloudWatch alarm for CPU utilization** that triggers when usage exceeds 65%, also sending notifications to the same or a different SNS topic.

Confirm Email Subscription

- Ensure to confirm your email subscription to the SNS topic by checking your email and clicking on the confirmation link.