

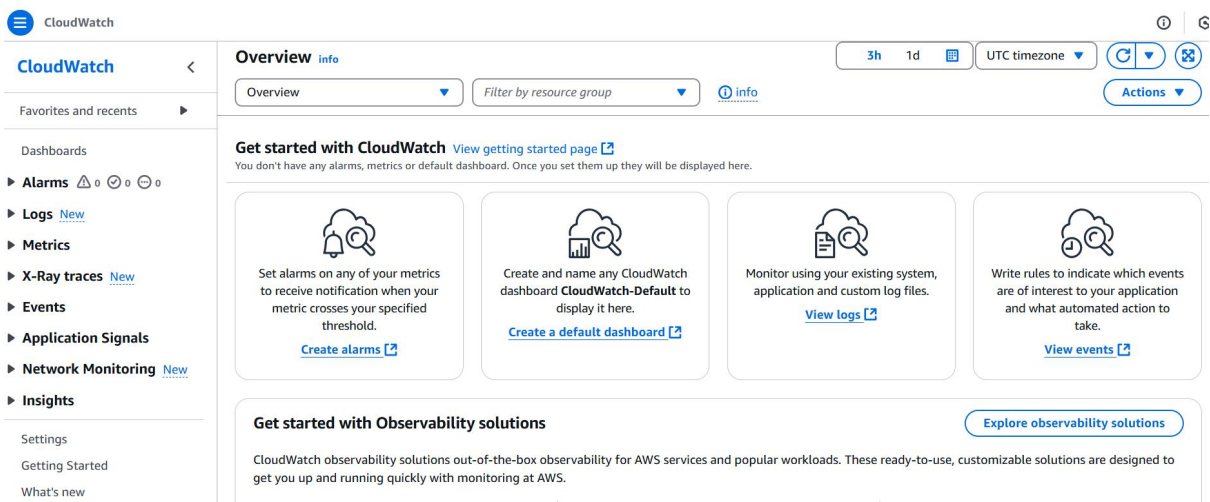
Setup an alarm in Amazon Cloudwatch to monitor CPU Utilization for an EC2 instance . Trigger the alarm if CPU utilization exceeds 80% for 5 consecutive minutes.

- Prplevamp20

Overview

Amazon CloudWatch is a monitoring and observability service that provides data and actionable insights to monitor your applications, optimize resource utilization, and respond to system-wide performance changes. Setting up an alarm in CloudWatch allows you to monitor specific metrics (e.g., CPU utilization for an EC2 instance) and take automated actions or receive notifications when thresholds are breached.

The task focuses on configuring a CloudWatch alarm to monitor CPU utilization for an EC2 instance, triggering an alert when the CPU usage exceeds 80% for 5 consecutive minutes.



Prerequisites

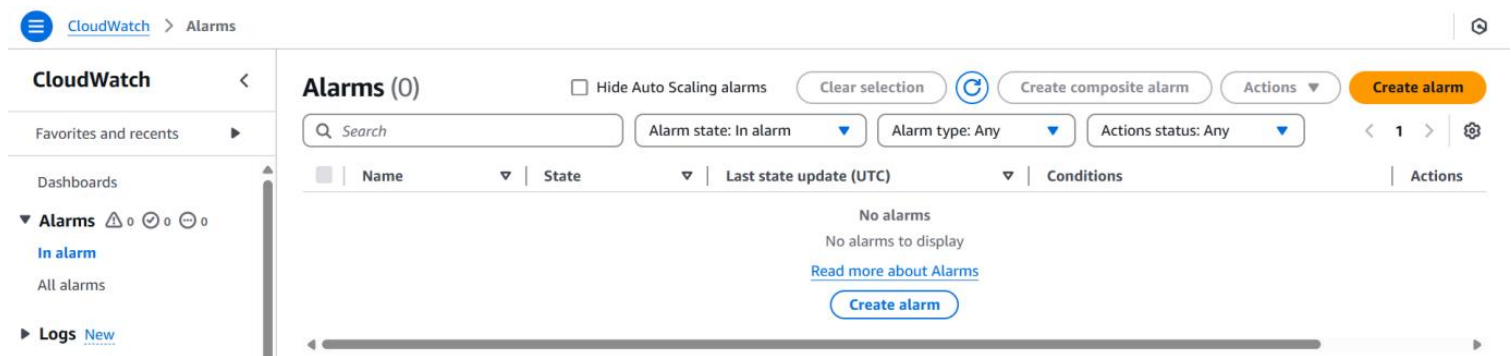
- **AWS Account:** Active account with CloudWatch and EC2 access.
- **Running EC2 Instance:** An instance to monitor, using a supported AMI (e.g., Amazon Linux).
- **CloudWatch Agent:** Optional for tracking metrics like memory and disk usage.
- **SNS Topic:** For receiving alarm notifications (e.g., email or SMS).
- **Basic Info :** Instance name, CPU threshold (80%), and evaluation duration (5 minutes).

Step 1: Log in to AWS Console

Access the AWS Management Console and navigate to the **CloudWatch** service.

Step 2: Navigate to Alarms

- In the CloudWatch dashboard, on the left-hand side, click on **Alarms** under the **Events** section.
- Click **Create alarm** at the top of the page.



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Step 3: Select a Metric

- In the Create Alarm window, click Select Metric.
- Navigate to EC2 > Per-Instance Metrics.

Step 1

Specify metric and conditions

Step 2

Configure actions

Step 3

Add name and description

Step 4

Preview and create

Metric

Graph

Preview of the metric or metric expression and the alarm threshold.

Select metric

Cancel

Next

Browse

Multi source query

Graphed metrics

Options

Source

Add math

Add query

Mumbai

Q Search for any metric, dimension, resource id or account id

EBS

8

EC2

19

Events

1

Logs

2

Usage

60

Per-Instance Metrics

19

Step 4: Choose CPU Utilization Metric

☒

webdeployment

i-000424f82720d...

CPUUtilization

No alarms

Step 5: Configure Metric and Conditions

- **Statistic:** Leave it as **Average**.
- **Period:** Set to **1 minute**.
- **Threshold Type:** Select **Static** to define a specific value.
- **Threshold:** Set to **Greater than 80**.

Step 6: Set Evaluation Periods

80

Must be a number

Additional configuration

Datapoints to alarm

Define the number of datapoints within the evaluation period that must be breaching to cause the alarm to go to ALARM state.

5

out of

5

Missing data treatment

How to treat missing data when evaluating the alarm.

Treat missing data as missing

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- In the **Condition** section, under **Additional Configuration**, set the **Datapoints to Alarm** to 5 out of 5.
- This ensures the alarm triggers only if the CPU Utilization exceeds 80% for **5 consecutive 1-minute periods** (5 minutes in total).

Step 7: Set Up Notification

- Click **Next** and create an SNS topic (or use an existing one) to send the alert.
- Provide an email address to receive notifications and confirm the subscription via the email sent to you.

Create a new topic...

The topic name must be unique.

Default_CloudWatch_Alarms_Topic

SNS topic names can contain only alphanumeric characters, hyphens (-) and underscores (_).

Email endpoints that will receive the notification...

Add a comma-separated list of email addresses. Each address will be added as a subscription to the topic above.

user1@example.com, user2@example.com

Create topic

Add notification

Step 7: Name the alarm

- On the next page, provide a name for your alarm (e.g., "High CPU Alarm").
- Review the settings and click **Create Alarm**.

CloudWatch > Alarms > Create alarm

Step 2: Configure actions

Edit

Actions

Notification

When In alarm, send a notification to "Default_CloudWatch_Alarms_Topic"

Step 3: Add name and description

Edit

Name and description

Name

practical

Description

-

Cancel

Previous

Create alarm

Your alarm is now set up to monitor CPU utilization and notify you if it exceeds 80% for 5 minutes.