============

Cloud Watch

============

=> It is used for monitoring aws resources.

=> CloudWatch enables real-time monitoring of AWS resources such as Ec2 , EBS volumes, Elastic Load Balancing and RDS instances.

==========

Usecase

==========

=> Create EC2 instance in aws cloud

=> Monitor that EC2 Instance 24/7

=> If Ec2 instance CPU utilization is above 90 % then trigger alarm.

=> When alarm got triggered send email notification to management.

======================================

How to send Email notification in AWS

======================================

=> In AWS we have SNS to send notifications

SNS : Simple Notification Service

=> SNS works based on Pub and Sub Model

Pub => Publisher (will send msg to sns topic)

Sub => Subscriber (will receive msg from topic)

==============================

Cloud Watch & SNS - Lab Task

==============================

1) Create SNS Topic with Email Notification (Standard Create)

Topic Name : codetech-topic

2) Configure Email Subscription in SNS Topic (Confirm Subscription recieved in email)

3) Create EC2 Instance and Configure Cloud Watch Alaram To Monitor

-> Select EC2 Instance -> Action -> Monitor and trouble Shoot -> Manager Cloud Watch Alarms -> Create cloud watch Alarm

Alaram Notification : Select SNS Topic which we have created

Alaram Thresh Hold : Avg CPU Utiliation >= 5%

4) Connect to EC2 VM using ssh client and increase load

$ sudo yum install stress -y

$ sudo stress --cpu 8 -v --timeout 180s

Note: Execute stress command 3 to 4 times...

5) Observe the behaviour of Cloud Watch / Alaram / SNS

(We should get Email Notification)

Note: When Alarm got triggered, its status will be changed to 'In Alarm'

=> We can Monitor our Alarm history (how many times it got triggered)

(Goto Cloud Watch -> Select Alarms -> Click Alarm -> Click on History).