

#### LOGICLABS TECHNOLOGIES

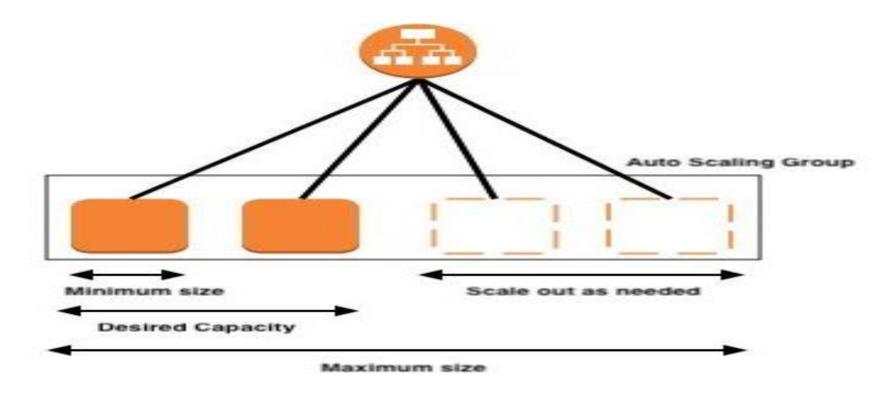
www.logiclabstech.com

## **Amazon Web Services**

**Auto Scaling** 

ankitnarula1991@gmail.com

 Amazon EC2 Auto Scaling helps you maintain application availability and allows you to automatically add or remove EC2 instances according to conditions you define.



- Steps we are following in Auto Scaling
- Create Launch configuration / Launch Template
- Create Topic in SNS (Simple Notification Service)
- Create Auto scaling group
- Create Application Load Balancer
- Create Target Group
- Create Alarm in Cloud Watch
- Add Policy in Auto Scaling

- Create Launch configuration
- A launch configuration is an instance configuration template that an Auto Scaling group uses to launch EC2 instances.

#### **Auto Scaling**



**Launch Configuration** 

- Click on Create Launch Configuration
- Enter the name.
- Select Amazon Machine Image (AMI) (ami-08e0ca9924195beba)

- Select Instance type
- Click on Choose Instance type
- Search instance type (t2.micro)
- Select our instance & Click on Choose
- Click on Advanced Option
- Add Bootstrap script Code: <u>Click Here</u>
- Select existing Security Group or create new security group
- Select existing Key Pair or create new key pair
- Click on Create Launch Configuration

- Create Topic in SNS (Simple Notification Service)
- Search Simple Notification Service
- Enter the Name

- Click on Next Step
- Select type as Standard & Enter Display name
- Click on Create Topic

- Click on Create Subscription
- Select protocol as Email
- Enter endpoint (Contact Email Address)
- Click on Create Subscription
- Now check our email address & Confirm
- Now check the status of SNS

Create Auto Scaling Group

 An AWS Auto Scaling group (ASG) is a fleet of EC2 instances that can scale up or down depending on application demand.

Go to Launch Configuration

**Auto Scaling** 



**Launch Configuration** 

Select the Launch Configuration

**Actions** 



**Create Auto Scaling Group** 

- Enter the name of Auto Scaling
- Click on Next
- Select subnet
- Click on Next
- Select attach to a new load balancer (Create Application Load Balancer)
- Select load balancer schema as internet-facing
- For More info about Load Balancer schema: Click Here
- Select default routing as create a target group
- Click on Next

- Enter the Group Size
- Click on Next
- Click on Add Notification
- Select SNS Topic
- Click on Next
- Click on Add Tag
- Enter the Key & Value
- Click on Next
- Click on Create Auto Scaling Group

- Create Alarm in Cloud Watch
- Amazon CloudWatch is a monitoring and management service that provides data and actionable insights for AWS, hybrid, and onpremises applications and infrastructure resources
- Select CloudWatch
- Go to Alarms
- Click on In alarm
- Click on Create Alarm
- Click on Select metric

- Select EC2
- Select By Auto Scaling Group
- Select CPUUtilization as Metric Name.
- Click on Select metric
- Select the Condition & Enter the value. (Greater than 80)
- Click on Next
- Select the Topic

Click on Next

Enter Alarm Name & Description

Click on Next

Review & Click on Create Alarm

Create one More alarm

Select the Condition & Enter the value. (Lower than 30)

- Add Policy in Auto Scaling
- Go to Auto Scaling Group
- Click on the Name of our Auto Scaling Group
- Go to Automatic Scaling tab
- Click on Create Dynamic Scaling Policy
- Change Policy Type to Simple Scaling

- Enter the name of the Policy
- Select the CloudWatch Alarm
- Enter the Capacity Units. (How Many Machine Get Added While Reaching our Alarm Limit)
- Click on Create
- Like same we need to create one more policy when Load will be less on our machines then system will automatically delete those EC2 Machines.

#### **Auto Scaling - Deleting Process**

- Delete Auto scaling
- Delete launch configuration (Instances will be terminated automatically)
- Delete Load balancer
- Delete Target Group
- Delete Topic
- Delete Alarm



# ankitnarula1991@gmail.com