

AWS Assignment 3

1. Explain the concept of auto-scaling?

Ans- Amazon EC2 Auto Scaling helps you ensure that you have the correct number of Amazon EC2 instances available to handle the load for your application. You create collections of EC2 instances, called Auto Scaling groups. You can specify the minimum number of instances in each Auto Scaling group, and Amazon EC2 Auto Scaling ensures that your group never goes below this size. You can specify the maximum number of instances in each Auto Scaling group, and Amazon EC2 Auto Scaling ensures that your group never goes above this size. If you specify the desired capacity, either when you create the group or at any time thereafter, Amazon EC2 Auto Scaling ensures that your group has this many instances. If you specify scaling policies, then Amazon EC2 Auto Scaling can launch or terminate instances as demand on your application increases or decreases.

2. Explain Cloud Formation Solution.

Ans - AWS CloudFormation is a service that helps you model and set up your AWS resources so that you can spend less time managing those resources and more time focusing on your applications that run in AWS. You create a template that describes all the AWS resources that you want (like Amazon EC2 instances or Amazon RDS DB instances), and CloudFormation takes care of provisioning and configuring those resources for you. You don't need to individually create and configure AWS resources and figure out what's dependent on what; CloudFormation handles that.

3. Mention and explain AWS services that are not specialized to a specific location.

Ans- Some services are classed as global services, such as **AWS Identity & Access Management (IAM)** or **Amazon CloudFront**, which means that these services are not tied to a specific region.

4. What's the difference between pausing and terminating an Amazon Elastic Compute Cloud instance?

Ans - When an instance is stopped, the instance performs a normal shutdown and then transitions to a stopped state. When an instance is terminated, the instance performs a normal shutdown, then the attached Amazon EBS volumes are deleted unless the volume's `deleteOnTermination` attribute is set to false.

5. Describe how to set up CloudWatch to recover an EC2 instance.

Ans – Below are the steps:

1. Open the [Amazon EC2 console](#).
2. In the navigation pane, choose Instances.
3. Select the instance that you want to configure.

4. Choose Actions, and then choose Monitor and troubleshoot. Then, choose Manage CloudWatch alarms.
5. Choose Create an alarm.
Note: To create an alarm, you must have AWS Identity and Access Management (IAM) permissions to stop and start the associated instance. For more information, see [Creating IAM roles](#).
6. For Alarm notification, choose an existing Amazon Simple Notification Service (Amazon SNS) topic. To create a new topic, see [Creating an Amazon SNS topic](#).
Note: To receive notifications when an alarm is triggered, you must be [subscribed to the SNS topic](#).
7. Toggle on Alarm action, and then choose Recover.
8. For Group samples by and Type of data to sample, choose an appropriate statistic and metric for your use case.
9. For Consecutive period and Period, specify the evaluation period for the alarm.
10. (Optional) Modify the automatically created Alarm name.
11. Choose Create.