Assignment – 2

1. Explain AWS global infrastructure.

The AWS global infrastructure is

AWS Region: - A region is a collection of data centre’s which are completely isolated from other regions. A region consists of more than two availability zones connected to each other through links. Increase redundancy and fault tolerance further by replicating data between geographic Regions.

AWS Availability Zone: - An availability zone is a facility that can be somewhere in a country or in a city. Inside this facility, i.e., Data Centre, there are multiple servers, switches, load balancing, firewalls. The things which interact with the cloud sits inside the data centre’s.

AWS Edge Location: - Edge locations are the endpoints for AWS used for caching content. Edge location is not a region but a small location that AWS have. It is used for caching the content. Edge locations are mainly located in most of the major cities to distribute the content to end users with reduced latency.

AWS Regional Edge Cache: - When the user requests the data, then data is no longer available at the edge location. Therefore, the edge location retrieves the cached data from the regional edge cache instead of the Origin servers that have high latency.

1. Explain different types of instances.

General Purpose Instance: - It will give the response of the user request in a rapid way. Ex: Gmail.

Compute Instance: - It will perform the continues flow of the of the streaming Data. Ex: YouTube.

Memory Instance: - This type of instances use mainly for multi-tasking applications.

Storage Instance:- These type of instances uses for High Storage required applications.

GPU Instance:- These instances mainly uses for gaming applications for better graphics.

1. Explain different types of instances based on pricing.

On-Demand Instance:- It will Provide a Space for a particular time and after it completes its given time. This will automatically terminates all the services.

Dedicated Instance:- It is used for the organization purpose and only the registered members of the particular organization can access it outside people of the organization cannot access the information from the instance.

Reserved Instance: - It is basically used for reserve the instance before developing of the application.

On-Spot Instance: - It’s Like a bidding the instance based on the organization budget.

1. Explain the features of EC2.

Cost Effective: - It will save the money to invest on Isolated Physical servers and maintance cost of the Physical server.

Flexible to use: - Wherever in the world, if we want to expand our server space, we can make it through service provider.

Scalable: - It will easily manage the load of the server when the number of users is more for a particular application.

1. Explain 7 steps to launch the instance.

[Step 1: Choose an Amazon Machine Image (AMI)](https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/launching-instance.html#step-1-AMI)

An AMI contains the information required to create a new instance. For example, an AMI might contain the software required to act as a web server, such as Linux, Apache, and your website.

[Step 2: Choose an Instance Type](https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/launching-instance.html#choose-an-instance-type-page)

Select the hardware configuration and size of the instance to launch. Larger instance types have more CPU and memory.

[Step 3: Configure Instance Details](https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/launching-instance.html#configure_instance_details_step)

Change the following settings as necessary for our application.

[Step 4: Add Storage](https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/launching-instance.html#step-4-add-storage)

Select the required storage for the application.

[Step 5: Add Tags](https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/launching-instance.html#step-5-add-tags)

[Step 6: Configure Security Group](https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/launching-instance.html#step-6-configure-security-group)

Select the Security group which ever require for the application

[Step 7: Review Instance Launch and Select Key Pair](https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/launching-instance.html#step-7-review-instance-launch)

Review all the instance details and launch the Instance with creation Key Pair value.

1. What is the command to update the instance?

The command to update the instance is “yum update”

1. What is the command to shift as a root user from ec2 user?

The command to shift as a root user from ec2 user “sudo su”

Su means Super User

1. Mention the different ways to connect to AWS?

The different ways to connect to AWS are: -

* Through AWS Direct Connect
* Through SSH Client Connect
* Through AWS CLI Connect