

Q1. Enlist the characteristics of EC2.

Ans. Amazon EC2 provides the following features:-

- 1) Virtual computing environments, known as instances
- 2) Preconfigured templates for your instances, known as Amazon Machine Images (AMI), that package the bits you need for your server (including the operating system and additional software) package the bits you need for your server (including the operating system and additional software)
- 3) Various configurations of CPU, memory, storage, and networking capacity for your instances, known as instance ~~state~~ ~~volumes~~ types.
- 4) Secure login information for your instances using key pairs (AWS stores the public key, and you store the private key in a secure place).
- 5) Storage volumes for temporary data that's deleted when you stop, hibernate, or terminate your instance, known as instance state volumes.
- 6) Persistence storage volumes for your data using Amazon Elastic Block Store (Amazon EBS), known as Amazon EBS volumes.

Q2. Give the requirements of EC2.

Ans. The requirements for EC2 are:-

- 1) AWS account
 - An active AWS account

2) EC2 instance type requirement

- General purpose: t2, t3 (web servers, development)
- Compute optimized: c5, c6 (for CPU-intensive applications)
- Storage optimized: i3, d2 (for high IOPS or large datasets)

3) Operating system

- Choose the desired AMI (Amazon Machine Image):
- Linux eg: Ubuntu, Amazon Linux, Centos)
- Windows server
- Custom AMIs

4) Storage

- Choose the volume type for your instance:
- EBS (Elastic Block Store)
- Instance Store

5) Networking Tools

- An SSH client (eg: OpenSSH, PuTTY)
- Configure a domain or use a Route 53 service

Q3. Give the steps to Launch Amazon EC2 Linux instance using command line interface.