AWS - Amazon Web Services:

Agenda:

* What is Cloud Computing?
* Why is everybody running behind it?
* Advantages of Cloud Computing.
* Service Models on Cloud Computing
* What is AWS?

What is Cloud Computing?

Def of Cloud Computing:

Cloud Computing means storing and accessing data and programs over the Internet of your computer’s hard drive.

NIST Definition of Cloud Computing:

* Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.
* Instead of doing computing on local machine / on-premises, now you will doing computing in remote locations (Cloud) that is called Cloud Computing.

Pay-as-you-go:

pay for the resources based on usage.

If you use a server for 1 hr, you pay for 1 hr.

If you use a storage for 10 GB, you pay for 10 GB.

Pay-as-you-grow:

pay for the resources based on resource configuration.

nano, micro, small, medium, large, x large, ......

Advantages of Cloud Computing:

* + On-demand self-service
  + Broad network access & High Availability
  + Resource pooling
  + Rapid elasticity
  + Measured services.

Deployment Models: (Types of Cloud)

Public Model:

* + everybody accesses from internet.
  + Open for all… & Maintenance
  + The providers services which are accessed by everyone like AWS, Azure, GCP.

Private Model:

* + restricted access within range.
  + Dedicated for one organization users…
  + Using corporate credentials, they can env…
  + Maintenance: Org maintain dedicated team… / 3rd party org…
  + The providers services which are accessed within the organisation like Oracle.

Hybrid Model:

* + Combination of multiple cloud providers…
  + Pub + Pub / Pub + Pri…
  + The combination of public & private cloud.
  + Server in AWS + Server in Azure 🡪 can we enable communication...: YES.
  + Your ORG owned a Data Center + AWS => YES

Community Model:

* + Group of Org, Pool the money and build the DC… only that group of organization allowed to use these resources…

Service Models:

* Infrastructure as a Service (IAAS)
* Platform as a Service (PAAS)
* Software as a Service (SAAS)

IAM- IDENTITY ACCESS MANAGEMENT