

DAY 1/100AWSDefination:

Cloud Computing is the on-demand delivery of IT resources over the Internet with pay-as-you-go pricing. Instead of buying, owning & maintaining physical data centre and servers, you can access technology services, such as computing power, storage & database, on an as-needed basis from cloud provider like Amazon Web Services (AWS).

History:

In 2002, Amazon started Amazon web Services, providing services like storage, computation & even human intelligence. However, only starting with the launch of Elastic Compute Cloud in 2006 a truly commercial services open to everybody existed.

2009 → Google Cloud Platform [GCP]

2009 → Azure [Microsoft]



## Benefits:

There is number of benefits of cloud computing. Some of benefits are given below:

- 1) Trade Capital for variable expense
- 2) Benefit from massive economies of scale
- 3) STOP Guessing Capacity
- 4) Increase speed & agility.
- 5) Stop spending money running & maintaining data centers.
- 6) Go global in minutes.

## Disadvantages:

- 1) DOW Time.
- 2) Security And Privacy
- 3) Vulnerability to attack
- 4) Limited Control & flexibility
- 5) Vendor lock-in
- 6) Cost Concerns.



## Types of Cloud Computing:

### ① Infrastructure as a Service [IaaS]:

IaaS Contains the basic building block for cloud IT. It typically provides access to networking, servers, computers & data storage space. IaaS gives you the highest level of flexibility and management control over your IT resources. It is most similar to the existing IT resources with which many IT departments and developers are familiar.

- Provide building block for cloud IT.
- Provide networking, computers, data storage space.
- Highest level of flexibility.
- Easy to deal with traditional on-premises IT.

### ② Platform as a Service [PaaS]

PaaS removes the need for you to manage underlying infrastructure & allows you to focus on the development of your application. This helps you to be more efficient as you don't need to worry about resource procurement, capacity planning, software maintenance, patching or any of the other undifferentiated heavy lifting involved in running your application.



- Removes the need for your organization to manage the underlying infrastructure
- Focus on the deployment & management of your application.

### ③ Software as a Services [SaaS] ÷

SaaS provides you with a complete product that is run and managed by the service provider. In most cases, people referring to SaaS are referring to end-user application (such as web-based email) with SaaS offering, you don't have to think about how the service is maintained or how the underlying infrastructure is managed. You only need to think about how you will use that particular software.

- Completed product that is run & managed by service provider.



On-Premises	IaaS	PAAS	SAAS
Application	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Data	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Runtime	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Middleware	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
O/S	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Virtualization	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Servers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Storage	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Networking	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Managed by &gt;

You

by Cloud