

MCA SEM-III 2023-2024

CLOUD TECHNOLOGY – INTRODUCTION

By,
Dr.Anupriya Kamble,
Senior Faculty-IT
ADYPU, Pune.



CLOUD COMPUTING

To develop an application or host a website, servers are required. These servers has to be maintained, security issues have to be resolved, security mechanisms have to be designed.

So cost of servers, maintenance, security risk issues and resolutions have to be maintained which increases the cost.

To reduce this cost, only to concentrate on hosting a website or to develop an application and remaining all services to be outsourced is possible with the help of Cloud Computing.



CLOUD COMPUTING DEFINITION

Cloud Computing is the use of remote servers on the internet to

STORE

MANAGE

PROCESS

Data rather than local servers.



IAAS

Infrastructure As A Service:

The following infrastructure is provided as a service:

Operating system

Virtual m/c & Storage

IP Addresses

Provides Infrastructure

Enhanced Scalability

Flexible



AWS

Amazon Web Services.

Amazon Web Services (Login) -> Core -> EC2 provides IAAS.



AWS Core Services

AWS Core Service can be grouped into different categories:

- 1. Compute Services: Allows to run virtual machines, containers and serverless functions in the cloud. Ex.: EC2 instances, AWS Elastic Beanstalk.
- 2. Storage Services: Provides scalable and highly available solutions for DATA and BACKUP. Ex. S3, EBS, Glacier
- 3. Database: Managed Data solutions for storing and managing the data. Ex.:RDBMS, Dynamo DB and Amazon Redshift.



AWS Core Services

- 4. Networking Services: Provides network connectivity and security. Ex.: VPC, Route 53
- 5. Secured Identity: Provides Security and identity management for cloud resources. Ex.:AWS identity and access management, Amazon guard duty and AWS certificate Manager.
- 6. Analytics: Provides tools for analysing and visualizing the data. Ex.Amazon Quick site, Redshift.



AWS Core Services

- 7. Management and Governance: Services that provides tools for Managing and Governing cloud services. Ex.: AWS Cloud formation, AWS System Manager.
- 8. Applications Integration: Services that provide messaging, workflow and other integration pattern for connecting and coordinating the distributing applications. Ex.: Simple Queue Services.
- 9. Developer tools: Services that help the developers to build, test and deploy applications. Ex.:AWS code build.



References

- 1. https://aws.amazon.com/what-is-cloud-computing/
- 2. https://docs.aws.amazon.com/whitepapers/latest/public-sector-cloud-transformation/core-services-and-additional-services.html





