



AWS

Certification

Elevate your career with AWS Certification – your gateway to mastering the cloud and shaping the future of technology.

Agenda

- Goal
- Cloud Computing
- Different methods of Cloud
- Types of Cloud Computing

Goal

1

Our goal is to ensure a comprehensive understanding of AWS Cloud Practitioner Certification

2

Having fundamental IT Knowledge is advantageous.

3

This course is particularly well-suited for beginners in IT.

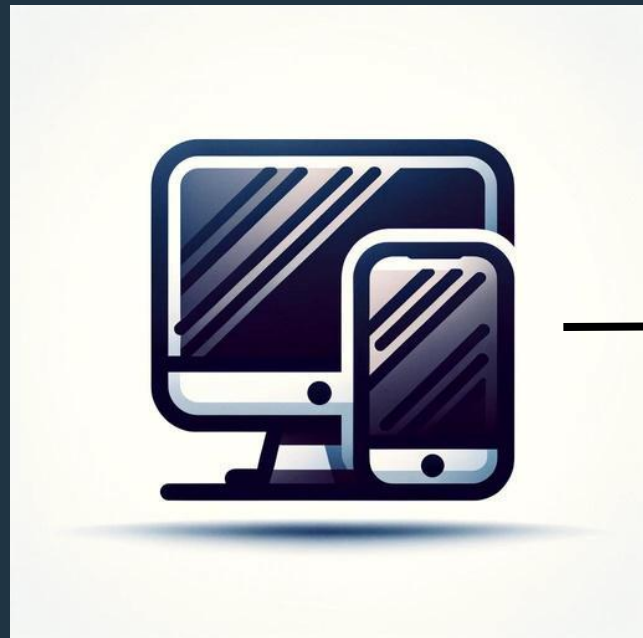
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This course emphasises a practical learning approach, combining both theoretical knowledge and hands-on experience.

What is Cloud Computing?



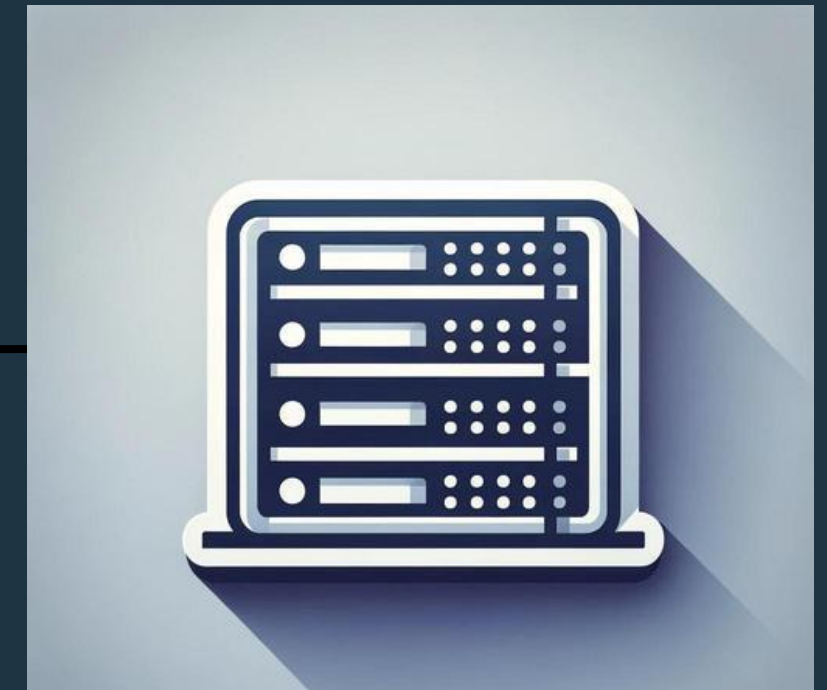
How website works?



Client



Network



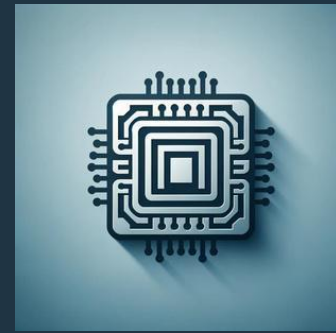
Server

Client IP Address

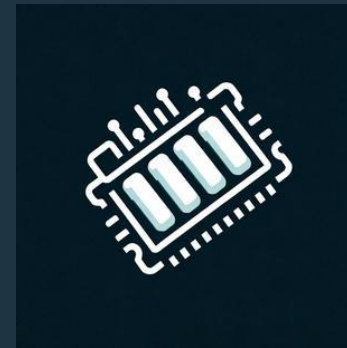
Server IP Address

What components make up a server?

- Compute: CPU
- Memory: RAM



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- Storage Data



- Database: Store data in structured way



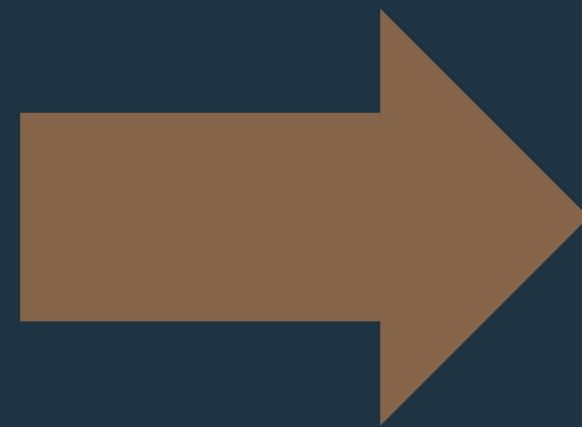
- Network: Router, Switch, DNS Server



How infrastructure build traditionally?



Home



Office



Datacenter

Issues associated with the traditional approach in IT

1. Covering the rental costs of the datacenter.
2. Financing power supply, cooling systems, and maintenance expenses.
3. Time-consuming process for hardware expansion or replacement.
4. Constraints in scalability.
5. Employing a team for round-the-clock infrastructure monitoring.
6. Strategies for managing disaster scenarios (like earthquakes, power outages, fires, etc.)

Is it possible to outsource these responsibilities?



What is Cloud Computing?

- Cloud computing provides compute power, database storage, applications, and other IT resources on demand.
- This is facilitated through a cloud services platform offering a pay-as-you-go pricing model.

With AWS, the responsibility of maintaining the network-connected hardware for these services is theirs, while users can provision and utilize what they need through a web application.



Office



The Cloud

Companies using AWS



Cloud Deployment Models

Private Cloud

1. Cloud services dedicated to a single organization, kept private and not accessible to the general public.
2. Full authority and control over the cloud environment.
3. Enhanced security measures for sensitive applications.
4. Tailored to address specific business requirements.

Public Cloud

1. Cloud resources are managed and provided by an external cloud service provider and are accessed via the internet.



Cloud Deployment Models

Hybrid Cloud

1. Retain a portion of servers on-site while leveraging additional capabilities through cloud integration.
2. Maintain authority over confidential resources within your private infrastructure.
3. Benefit from the adaptability and economic efficiency offered by public cloud services.



Issues solved by Cloud Computing

- Alter the type of resources based on your needs.
- Pay only for what you use with a pay-as-you-go model.
- Enhance hardware capabilities or add more nodes to support larger workloads.
- Scale resources up or down as required.
- Develop systems spanning multiple data centers.

Types of Cloud Computing

Infrastructure as a Service(IaaS)

- Offers foundational elements for cloud-based IT infrastructure.
- Supplies networking capabilities, computing power, and data storage space.
- Ensures maximum flexibility.
- Easily comparable to conventional on-premises IT systems.

Platform as a Service(PaaS)

- Eliminates your organization's requirement to handle the basic infrastructure.
- Allows concentration on the deployment and management of your applications.

Types of Cloud Computing

Software as a Service(SaaS)

- A fully developed product that is operated and maintained by the service provider.

On-premises

IaaS

PaaS

SaaS

| | | | |
|----------------|----------------|----------------|----------------|
| Applications | Applications | Applications | Applications |
| Data | Data | Data | Data |
| Runtime | Runtime | Runtime | Runtime |
| Middleware | Middleware | Middleware | Middleware |
| O/S | O/S | O/S | O/S |
| Virtualization | Virtualization | Virtualization | Virtualization |
| Servers | Servers | Servers | Servers |
| Storage | Storage | Storage | Storage |
| Networking | Networking | Networking | Networking |

 You manage

 Service provider manages

Thank You

