Final Chapter-1

1. What is Cloud Computing

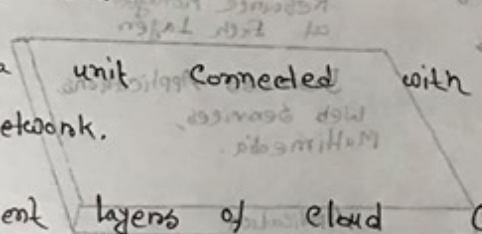
Ans: Cloud Computing is a type of Computing that relies on shared Computing resources. It uses internet technologies to offer scalable & elastic services

2. Write the basic structure of cloud Computing

Ans: Cloud Computing system can be divided into section. They are

a. Front end
b. Back end.

The each area unit connected with one another through a network.



3. Describe different layers of cloud Computing

Ans:

Cloud Computing can be categories into four layers. They are.

a. The Hardware Layer: Responsible for dealing with the physical assets of the cloud. Example: Routers, servers, switches, Cooling systems & Power.

b. The Infrastructure Layer: It's also called the visualization layer. Makes a Pool of storage capacity, Computing resource. Example: KVM, VMWare:

c. The Platform Layer: It's based on top of infrastructure layer. Deals with operating systems.

d. Application Layer: Comprise of the actual cloud Provisions. Example: Business applications, Multimedia & web services.

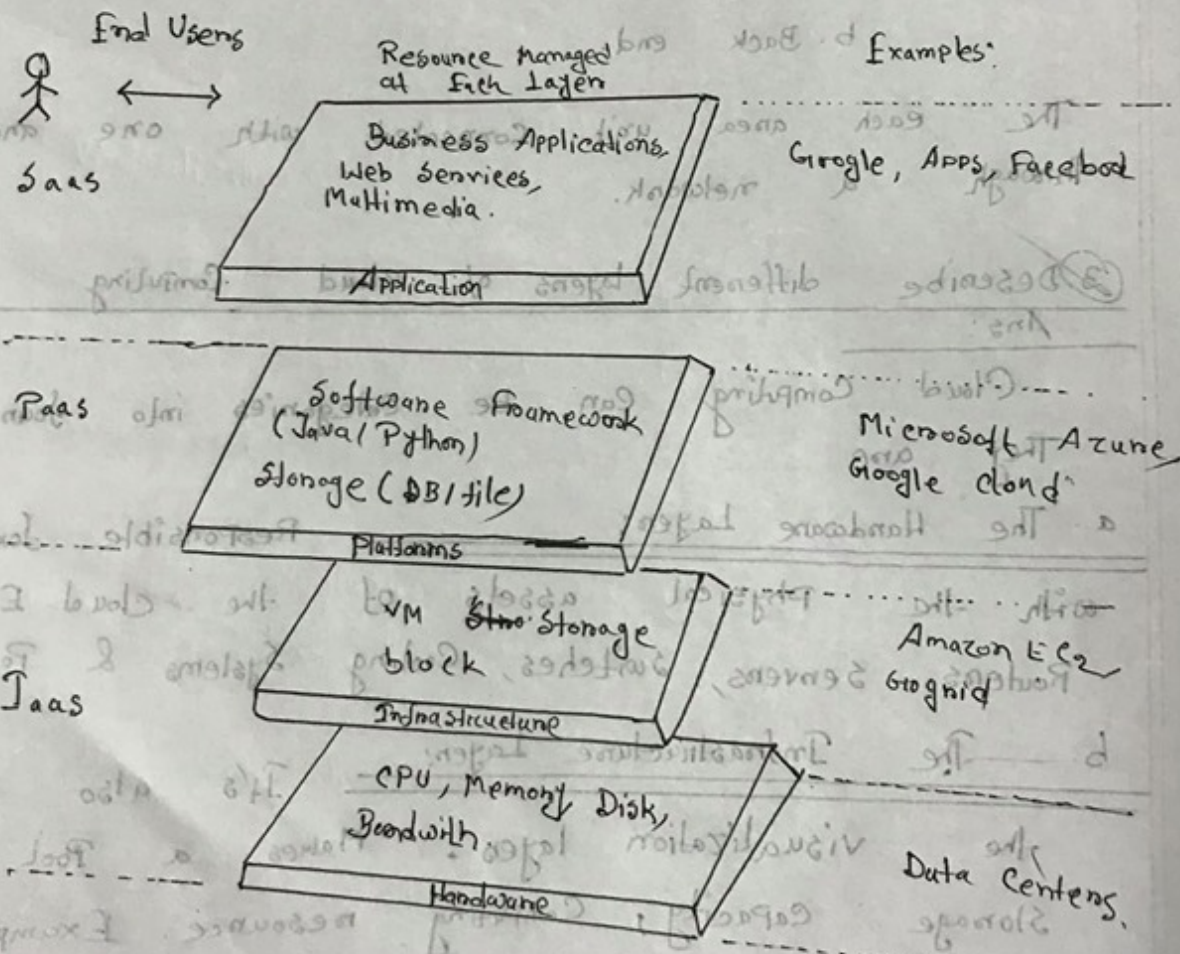


Fig: Cloud Computing Architecture.

(11) Write the advantages of Cloud Computing

Ans:

a. It's efficient
b. Cost saving
c. Accessibility
d. Disaster recovery
e. Scalability
f. Increased Productivity
g. Pay Per use facility
h. Massive resource Pool

(12) Describe different types of Cloud

Ans:

We have 4 types of Cloud

a. Public Cloud : Available to the general public, large industry group.

b. Private Cloud : The infrastructure is operated solely for an organization.

c. Community Cloud: The infrastructure is shared by several organizations.

d. Hybrid Cloud. Combination of Public, Private, Community Cloud. Standard technology. It enables data & application portability.

- Public Cloud => সবার জন্য access open
- Private Cloud => একটা organization এর জন্য
- Community Cloud => কয়েকটা organization মিলে

Q. What is Cloud Computing models

Ans:

Cloud Computing model means establishing Convenie on demand network access to a shared pool of Configureable Computing resources.

- তিন ধরনের Cloud Service Model আছে,
  - → Software as a Service (SaaS)
  - → Platform as a Service (PaaS)
  - → Infrastructure as a Service (IaaS)

Q. Describe ~~SaaS~~ IaaS

Ans:

IaaS means "Infrastructure as a Service."
It's a virtual Platform. Required operating environment.

It uses virtualization in order to integrate / decompose physical resources.

It also has dynamic ~~scall~~ scaling.

Example: Amazon's EC2

8. Describe Paas

Ans:

Paas means "Platform as a Service".

Paas uses the internet to host software application.

Paas offers a development Platform that hosts both completed & in Progress cloud applications.

Example: Google app engine.

9. Describe Saas

Ans:

Saas means "Software as a Service".

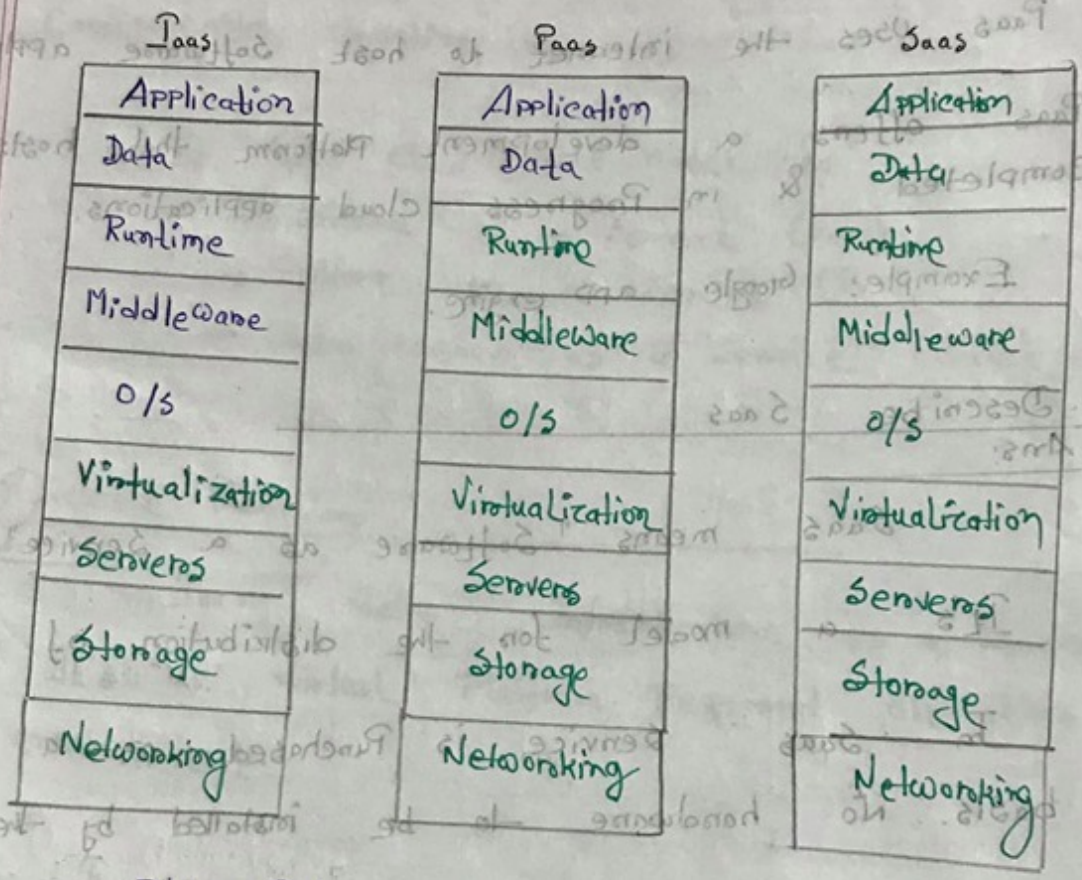
It's a model for the distribution of software.

In Saas service is Purchased on a subscription basis. No handware to be installed by the Customer.

Example: Google docs.

10. Draw Iaas, Paas, Saas in a single frame.

Ans:



Blue Colour means ⇒ User have to manage

Green Colour means ⇒ The Provider have manage

Fig: Cloud Computing Models in a single frame

11. Write the Characteristics of Cloud Computing

Ans:

a. Remote access
b. Less IT skills are needed.
c. Reliable services are obtained.
d. Sharing of resources.
e. Maintenance is simple.
f. Pay Per use facility.
g. Massive resource Pool.
h. Get service anyplace.

12. Draw Cloud Computing deployment model

Ans:

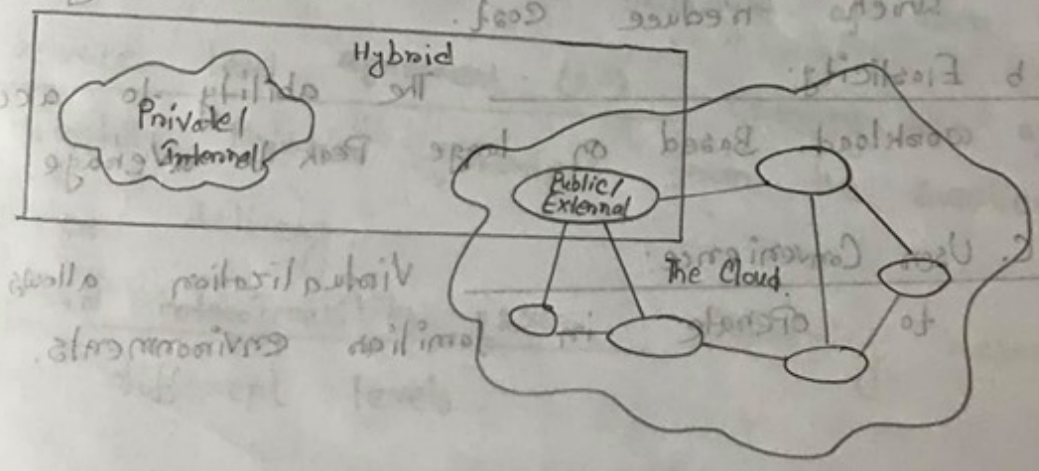


Fig: Cloud Computing Deployment Model

13. Write the key Points difference between cloud & servers - client model

Ans:

a. Fasten data Communication
b. Fasten & more reliable Computing.
c. Densen & cheapen Storage.
d. Newen Programming Paradigms.
e. Comprehensive Computational resource.

14. Write the more good Points of Cloud Computing -

Ans:

Three Points describe cloud as more good.

a. Cost reduction: It offen Pay Per use. Which reduce cost.

b. Elasticity: The ability to accomodate workload. Based on large Peak to average ratio.

C. User Convenience: Virtualization allows users to operate in familias environments.

16. Write the challenges of cloud Computing

Ans:

The challenges of cloud Computing are

a. Security:

Information loss, phishing ~~case~~ Cause are serious threats. Multi-tenancy model & Pooled Computing resource security introduce new security challenges

b. Cost accounting model: On-demand Computing is sensible. There are different Cost model for Public, Private, hybrid cloud.

c. Changing model: Price of Providing new options / to efficient amount of user access.

d. Service level agreement: (SLA) Creating the agreement carefully. Maintain guarantees from the supplier, on service delivery.

e. Cloud interoperability issue. Optimizing resources at different levels.

16. Write the service management issues of cloud Computing

Ans

a. Virtualization
b. Service Provisioning
c. Call centers.
d. Operations management
e. Systems management.
f. QoS management.
g. Billing & accounting
h. Asset management.
i. SLA management
j. Technical support
k. Backup.

17. Write the Security Management issues of Cloud Computing

Ans:

a. Id & authentication
b. Certification & accreditation
c. Virus Protection
d. Cryptography
e. Physical Security
f. Access Control

18. What are the areas for client, cloud looks up

Ans:

a. Customer assistance
b. Subscriptions
c. Reporting
d. Personalization

19. Define Network Centric Computing

Ans:

It's a type of framework for network centric software architecture.

20. Write the difference between grid Computing & utility Computing

Ans:

Grid Computing was used for scientific Computing. Works on distributed system.

Utility Computing targeted at enterprise Computing.

Future Internet ⇒ will be Content Centric

20. Define Network Centric Content

Ans:

It's a data approach on the network rather than the location.

21. Write the advantages of network centric content & Computing

Ans:

a. Shared Computing & Communication resources.
b. Data sharing facilitates.
c. Cost reduction
d. Users convenience

22. What is Peer-to-Peer system. What are the Properties

Ans:

It's a commonly used Computer networking architecture. in which each node has the same capabilities & responsibilities.

The Properties are

a. Required a minimally dedicated infrastructure.
b. Highly decentralized
c. Scalable.
d. Resilient to faults.
e. Operate in dynamic environment.

23. Write major ethical issues of cloud Computing

Ans:

The major ethical issues of cloud Computing are

a. The Control is relinquished to third Party services.
b. Data is stored in multiple sites.
c. Multiple services ~~into~~ interoperate across the network.
d. Vendor lock in.