CLOUD COMPUTING

ASSIGNMENT-1

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1. Discuss about cloud computing and cloud service model architecture?

A. cloudcomputing:

The term cloud refers to a network or the internet. It is a technology that uses remote server on the internet to store, manage and access data online rather than local, drives cloud service model is the reference model in the cloud computing. There are three types of cloud service models

1. Infrastructure as a service (Iaas)
2. Software as a service (Saas)
3. platform as a service (Paas)

Infrastructure as a service (Iaas):

Iaas is also known as hardware as a service (Haas). It is a computing infrastructure managed over the internet. The main advantage of using Iaas is that it helps users to avoid the cost and complexity of purchasing and managing the physical servers.

characteristics of Iaas:

→ Resources are available
→ services are highly scalable
→ Dynamic and flexible
→ GUI and API - based access
→ Automated administrative tasks.

Platform as a service:

Paas cloud computing platform is created for the programmer to develop, test, run and manage the applications.

characteristics of Paas:

Access to various users via the same development application.

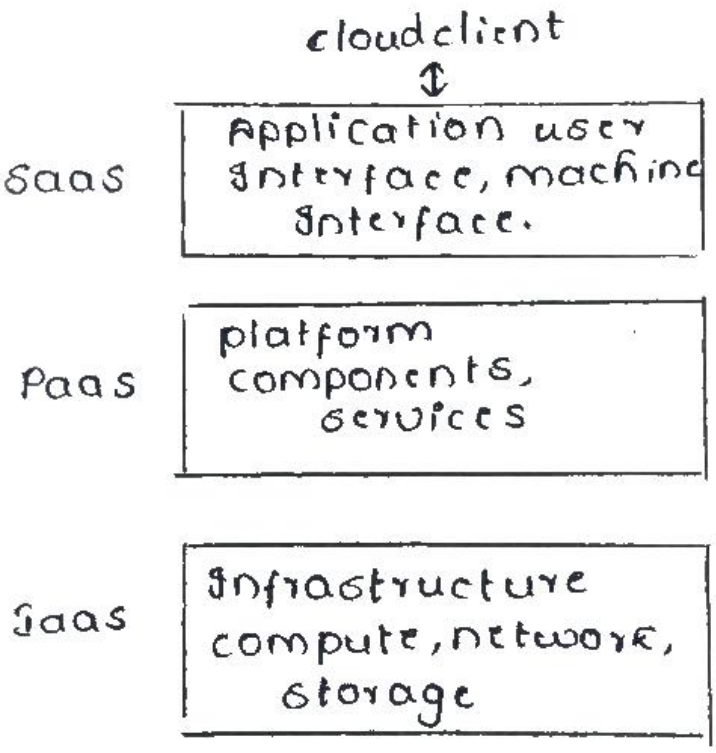
→ Integrates with web services and databases.
→ Support multiple languages and framework.
→ provides an ability to "auto scale"
Ex: windows, azure, force.com

Software as a service (Saas):

Saas is also known as "on-demand software". It is a software in which the applications are hosted by a cloud service provider users can access these applications with the help of Internet connection and web browser.

Characteristics of Saas:

→ Managed from a central location.
→ Hosted on a remote server.
→ Accessible over the internet.
→ Users are not responsible for hardware and software updates.
updates are applied automatically.
Ex: Big commerce, google apps, salesforce etc.



2. List out cloud service provides and also list out various security steps that will be considered in cloud computing.

A cloud provider is a company that offers some component of cloud computing typically Iaas, paas, saas to other business or individuals. cloud provides are sometimes referred to as cloud service providers.

some cloud service providers in the market there are number of cloud computing vendors, here are some of the major players in the market place.

1. Microsoft:

Microsoft azure is a cloud computing service created by microsopt for building, deploying and managing applications. It provides saas, pass, Iaas and support many different programming languages, tools and frameworks.

2. Amazon web services:

Amazon web services offers reliable, scalable and inexpensive cloud computing services. It is secure cloud service platform offering compute power, database storage, content delivery and other functionality to help businesses scale and grow.

3. Google:

Google app engine is a pass offering us to build run and maintain applications on google is infrastructure. It is a platform as a service architecture.

4. IBM:

IBM cloud includes infrastructure as a service (Iaas) platform as a service (paas) and software as a service (saas) offered through public, private and hybrid cloud delivery model.

5. salesforce.com:

It is an american cloud computing company which provides a simple user interface and build an app push it in the cloud. "Heroku" a home made application.

Security steps:

→ OTP authentication
→ Encryption
→ Data Integrity
→ Don't share personal information.
→ setup your privacy setting
→ use strong passwords.
→ use public wifi sparingly
→ use two factor authentication
→ Read the user agreements
→ use the cloud service that encrypts

3. Difference between Iaas and Pass and discuss about cloud computing in detail.

Iaas	Paas
1. Infrastructure as a service	1. Platform as a service.
2. It is widely used by network architects.	2. It is widely used by the developers.
3. Providers visual computing resources over the internet.	3. A cloud computing model that delivers the essentials and tools used in developing slw and applications.
4. Technical knowledge is required.	4. Basic knowledge is required for performing basic setup.
5. Give access to resources like virtual storage, virtual machine.	5. Give access to an environment that helps for developing basic applications.

6. popular among developers and researches. 7. services : Amazon web services, sun, vcloud express. 8. It is widely used by network architects 9. It is around 12% increment.	6. popular among developer of apps and scripts. 7. services : google search, engine and feedback. 8. It is widely used by developers. 9. It is around 32% increment.

Cloud computing:

Cloud computing is a general term for anything that involves delivering hosted services over the internet. These services are divided into three main categories of types of cloud computing Infrastructure as a service, platform as a service and software as a service.

A cloud can be private (or) public. A public cloud sell services to anyone on the internet. A private cloud is a proprietary network or a data center that supplies hosted services to a limited number of people. The goal of cloud computing resources and its services.

cloud infrastructure involves the hardware and software components requirements for proper implementation of a doud computing or cloud computing can also be thought of as utility computing or an demand computing.

Features:

→ Resources pooling
→ on demand self service
→ East maintainance.

Verified