



Cloud Computing

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Research Paper on
Cloud Computing

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ABSTRACT: : With latest trends in Information technologies field, pros and cons must be figure out by businesses of cloud computing and the best way to use Cloud Computing. The buzz around cloud computing has reached a fever pitch. As per peoples few believes that this trend hypes it industries and few believe it as a troublesome or disruptive trend. The industries establishment in computing technologies. One thing is clear: The diligence needs purposed, straightforward conversation about how this new computing sample can impact institution, how it can be used with existing technologies, and the potential pitfalls of parent technologies that can lead to lock-in and limited choice. This cloud computing is still in its younger age with much to learn and more experiments to cover. However, this is the time to come forward and accept this technology use it and enhance it by our experiences this may take the computing industries at another level

INTRODUCTION: Cloud computing refers to the processing a data weather it is storing or accessing from the source where the individual stored his data through internet sever. Instead of hard drive user store their data over the internet they can also process those data without download this data and mange this with their own format.

In the past, user would download the software on its system to run application or programme. But now with cloud computing people access it through the internet

It is:

- On Demand Model
- Shared pool of computing resources
- Provisioned Rapidly
- Released Rapidly
- Minimum Management Efforts of Service Providers

Cloud Computing Technologies

SaaS (Software-as-a-Service)

SaaS is hosted in the cloud. SaaS simply provide a service that you access over internet and use via a web browser or an API.

- In SaaS instead of complete management of software and hardware by installing an application we simply access it on internet therefore it
- Minimize the cost of maintaining hardware and software, scalability, benefits the clouds. It also offers Automatic upgrades

PaaS (Platform-as-a-Service)

PaaS cloud are created often with IaaS Clouds PaaS provides hardware, infrastructure and it also tools for development of the platform to the software developers. when and where they want them for managing application without the cost and developing and maintaining that platform on premises with a great scalability.

PaaS has a drawback or negative point whatever you say is that these services may have certain restriction that do not even work with their product.

IaaS (Infrastructure-as-a-Service)

IaaS is the type of Cloud Computing Services. In which the institutions provide some amount of space to the user in their devices which is access by the user or users can arrange their data with their own interest and format services such as –Drop Box, Google Drive, These are the best example of IaaS. IaaS provide space as per their needs data stored over internet on login basis.

Server less computing

Serverless cloud computing mention some of the applications which manages server side logic as well as propagating code hosted, these are manages by third party.

The serverless version emphasizes applications as opposed to infrastructure. In serverless architecture, the individual has the advantage of creating as well as releasing code without stressing over the underlying framework.

Cloud Computing Services: Who Manages What?

Traditional IT	IaaS	PaaS	Serverless	SaaS
Applications	Applications	Applications	Applications	Applications
Data	Data	Data	Data	Data
Runtime	Runtime	Runtime	Runtime	Runtime
Middleware	Middleware	Middleware	Middleware	Middleware
OS	OS	OS	OS	OS
Virtualization	Virtualization	Virtualization	Virtualization	Virtualization
Servers	Servers	Servers	Servers	Servers
Storage	Storage	Storage	Storage	Storage
Networking	Networking	Networking	Networking	Networking

■ You manage ■ Provider manages

Types of Cloud Computing

Public cloud

Public cloud computing lies on the group of those computer services which are offered by external providers through the internet. They are available to everyone also by using PC computer cloud service providers makes computing resources to hardware etc. These resources are available to user on public internet or it might be sold or access for free.

Private Cloud

Private cloud also known as an internal or corporate cloud. It uses private internal network to offer computer services and not available to general public.

It benefits cloud computing such as scalability, ease of service delivery.

Hybrid cloud

Hybrid cloud is basically a type of integration of two types of cloud one is private cloud and the other one is public cloud while storing a value when a user is shorted with a space in private cloud then it needed a public cloud for meeting its requirement then as you will naturally address the public cloud. That's why we are keeping webserver in public cloud and DB server in private cloud for security reasons.

Multicloud

Multi-cloud is the use of two or more then two cloud computing services its environment could be of any type may be it includes all private cloud or all public cloud and also it combines a both.

Cloud Security

Cloud computing security is the broadest term that refers to a set of plans tech or manages. It ensures data privacy secure and storage in the cloud. Cloud security improved the cloud ability to reduce outside threats include hacks corporates espionage etc

These are included in some of the best practices of cloud computing :-

- Manages user access
- Data encryption
- Access management
- User identification
- Collaborative management
- Security and compliance management monitoring

Benefits of Cloud security

- To Protect from Hackers
- Increase Reliability
- It Protects Sensitive Data

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