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Introduction to Cloud Computing

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Abstract- In this paper we are going to discuss about clouds,types of clouds,cloud computing ,how cloud computing works and what are benefits of cloud computing.In section 1, we will discuss what are clouds-cloud is used as a metaphor for internet.In section 2, types of clouds-public cloud,private cloud,community cloud and hybrid cloud.In section 3,what is cloud computing-it means an internet based computing.in section 4,benefits of cloud computing. Cloud computing is receiving a great deal of attention, both in publications and among users, from individuals at home to the U.S. government. Cloud computing is a subscription-based service where you can obtain networked storage space and computer resources. One way to think of cloud computing is to consider the experience with email.

Keywords-

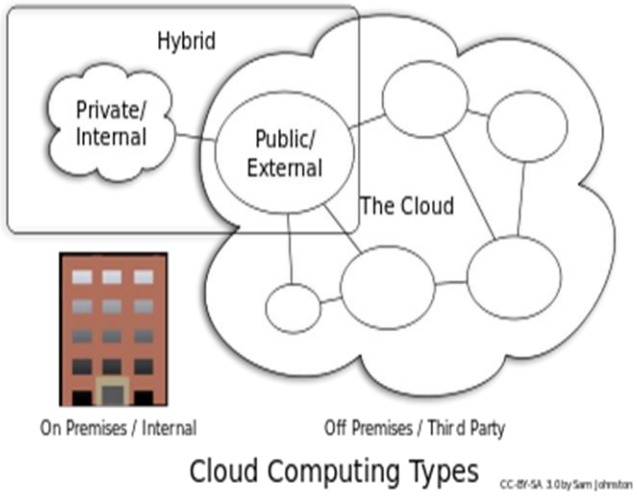
1. Introduction

1.1. what is cloud?

cloud is used as a metaphor for internet,also reffered to as network cloud. A cloud is reffered to a public or semi public space which has its existence between end points of a transmission on transmission lines in telecommunications.Cloud can be used to access information anywhere anytime.It's service is based on subscription to get networked storage space and computer resources.

1.2.Types of cloud :-

1.Public cloud
2.Private cloud
3.Community cloud
4.Hybrid cloud



2. Public cloud

Any subscriber with an internet connection and access to cloud space can access public cloud . A service provider who hosts the infrastructure of clouds makes public clouds available to general public.some examples of public cloud are Amazon AWS,Microsoft and google which own and operate the infrastructure over internet and gives access over internet.customers on public cloud have to share same infrastructure alongwith its limited configurations and protection regarding security.public cloud is a low cost operating model "pay according to use" model. In shared resources public clouds offers the greatest level of efficiency.

3. Private cloud

Private cloud is cloud infrastructure dedicated to a particular organisation.Private cloud is used when we need cloud efficiencies but with data sovereignity. Private clouds provides consistency across services and makes our data center more efficient.Private clouds allows business to host applications with data security and control.

4. Community cloud

community cloud is shared among several organisations which are managed and secured by all participating organisations.It is "multi tenant" cloud service model.

5. Hybrid cloud

It is a combination of two or more clouds that remain unique entities but are bound togetheroffering advantages of multiple deployment models.It is best when any company wants to use a SaaS application but with full security.Hybrid clouds are also used to provide public cloud to customers while using a private cloud for internal IT.

6. What is cloud computing?

cloud computing means a type of internet based computing. It consists of different types of services such as:- servers,storage and applications. It is a trusted computing platform with trusted computing and service.these applications are delivered through internet.There are some attributes of cloud computing these are availability, collaboration, elasticity, lower infrastructure costs, mobility, risk reduction, scalability, and virtualization.

Availability: Users have the ability to access their resources at any time through a standard internet connection.
Collaboration: Users begin to see the cloud as a way to work simultaneously on common data and information.
Elasticity: The provider transparently manages a user's resource utiliza-tion based on dynamically changing needs.
Scalability: Users have access to a large amount of resources that scale based on their demand.
Lower Infrastructure Costs: The pay-per-usage model allows an organization to only pay for the resources they need with basically no investment in the physical resources available in the cloud. There are no infra-structure maintenance or upgrade costs.
Risk Reduction: Organizations can use the cloud to test ideas and concepts before making major investments in technology.

7. How cloud computing works?

Its goal is to apply traditional super computing which is normally used by military and research facilities. It is used in consumer oriented applications to deliever personal information to give data storage. Techniques of virtualization are used to increase the power of cloud computing.

Virtualization: Each user has a single view of the available resources, inde-pendently of how they are arranged in terms of physical devices. Therefore, there is potential from a provider perspective to serve a greater number of users with fewer physical resources.

8. Benefits of cloud computing:-

1.Achieve economies of scale
2.Reduce capital costs.
3.Improve accessibility.
4.Less personnel training is needed.
5. Improve flexibility.
6.Reduce spending on technology infrastructure.

9. Conclusion

In this we come to know about the clouds,types of clouds, cloud computing and working of cloud computing and benefits of cloud computing. In this we come to know that if we are considering using the cloud, be sure that we identify what information we will be putting out in the cloud, who will have access to that information, and what have need to make sure that cloud is protected. Additionally, know our options in terms of what type of cloud will be best for our needs, what type of provider will be most useful to us, and what the reputation and responsibilities of the providers we are considering are before we sign up.

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