

Cloud Computing

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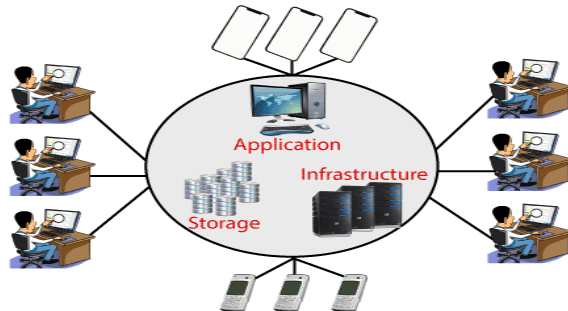
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Abstract- Cloud is a collective term for a large number of developments and possibilities. It is not an invention, but more of a “practical innovation”, combining several earlier inventions into something new and compelling. Much like the iPod is comprised of several existing concepts and technologies (the Walkman, MP3 compression and a portable hard disk), cloud computing merges several already available technologies: high bandwidth networks, virtualization, Web 2.0 interactivity, time sharing, and browser interfaces. The cloud service provider facilitates cloud computing to increase the capacity or add capability, for example without investing in a new infrastructure, training new people or licensing new software.

INTRODUCTION

Cloud Computing is the delivery of computing services such as servers, storage, databases, networking, software, analytics, intelligence, and more, over the Cloud (Internet).



Cloud Computing provides an alternative to the on-premises datacentre. With an on-premises datacentre we have to manage everything, such as purchasing and installing hardware, virtualization, installing the operating system, and any other required applications, setting up the network, configuring the firewall, and setting up storage for data. After doing all the set-up, we become responsible for maintaining it through its entire lifecycle.

1. Public Cloud

The public cloud is a set of hardware, networking, storage, services, applications, and interfaces owned and operated by a third party for use by other companies or individuals. You access these services and manage your account using a web browser. These commercial providers create a highly scalable data center that hides the details of the underlying infrastructure from the consumer.

2. Private Cloud

A private cloud is a set of hardware, networking, storage, services, applications, and interfaces owned and operated by an organization for the use of its employees, partners, or customers. A private cloud can be created and managed by a third party for the exclusive use of one enterprise. The private cloud is a highly controlled environment not open for public consumption. It is essentially just another way of running an on-premises data center.

3. Hybrid Cloud

A hybrid cloud is a combination of a private cloud combined with the use of public cloud services where the two cloud environments work together to solve business problems. By allowing data and applications to move between private and public clouds, a hybrid cloud gives your business greater flexibility, more deployment options and helps optimize your existing infrastructure, security, and compliance.

TYPES OF CLOUD SERVICES

1. Infrastructure as a Service (IaaS in Cloud Computing)

The capability provided to the consumer is to provision processing, storage, networks, and other fundamental computing resources. The consumer does not manage or control the underlying cloud infrastructure but has control over operating systems, storage, and deployed applications; and possibly limited control of select networking components (e.g., host firewalls).



2. Platform as a Service (PaaS in Cloud Computing)

The capability provided to the consumer is to deploy onto the Cloud infrastructure consumer-created or acquired applications using programming languages, libraries, services, and tools supported by the provider. The consumer does not manage or control the underlying Cloud infrastructure including network, servers, operating systems, or storage, but has control over the deployed applications and possibly configuration settings for the application-hosting environment.

3. Software as a Service (SaaS in Cloud Computing)

The capability provided to the consumer is their applications running on a Cloud infrastructure. The capability provided to the consumer is to use the provider's applications running on a Cloud infrastructure. The applications are accessible from various client devices through either a thin client interface, such as a web browser (e.g., web-based e-mail), or a program interface.

CONCLUION

In conclusion, cloud computing is recently new technological development that has the potential to have a great impact on the world. It has many benefits that it provides to it users and businesses. For example, some of the benefits that it provides to businesses, is that it reduces operating cost by spending less on maintenance and software upgrades and focus more on the businesses it self. But there are other challenges the cloud computing must overcome.

REFERENCE

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