

# OVERVIEW OF CLOUD COMPUTING AND ITS TYPES

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## ABSTRACT

Cloud computing is used in the IT infrastructure that are provided the services to the customer through the internet. Cloud computing delivered by a third party provider. It gives the low cost environment for the end user. It is a storage device to stored and maintain the data and application. We can get the any of the information through the internet and take backup. Cloud computing has the model of service and deployment those are provide the services to customer with low cost. User friendly and it is easy to access the data and application. The service model of the cloud computing is Software as a services (SAAS), platform as a Service (PAAS), and infrastructure as a Service (IAAS). These various services gives the different performance to access and maintain the data and application. It is appropriate the stored the data or information via internet.

**Keywords:** Software as a services (SAAS), platform as a Service (PAAS), and infrastructure as a Service (IAAS), appropriate, virtualization, apparent

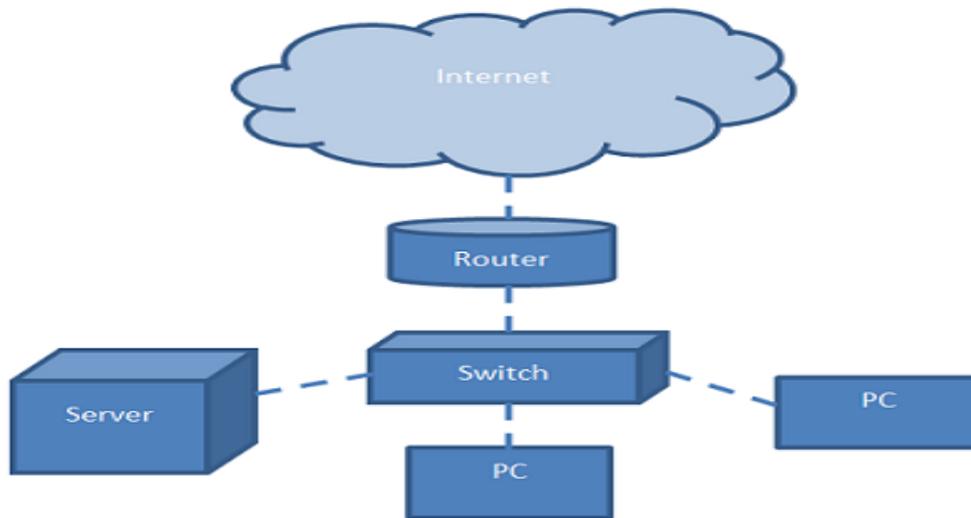
## I. INTRODUCTION

Everywhere used Cloud computing. When we take any of the magazine, website or blog you will see the talk about cloud computing. It is becoming one of the most popular technologies. It gives the opportunities to help the organization for increase their business. Many of the organizations use the cloud computing for storing purpose and it is used for business development process. According of NIST Cloud computing is a model for enabling everywhere, agreeable, on-demand network access to shared the computer resources (e.g., servers, networks, storage devices, applications and services). It is virtualization based technology and it reduces the cost of Information Technology Infrastructure. It gives the solution of IT infrastructure with low cost. Cloud Computing like Amazon, Microsoft, Google provides the services to the customer. It helped the business to development and maintains process. It stores the data in cloud we can easily modified, stored and delete the data. It is user friendly. Cloud computing makes a revolution in IT industry or any of the organization. It is combination of many different services because it improves the productivity and creativity. Cloud computing offers a wide range of solution so it successfully earned the interested. The wide range solution and advantages to industry or business such as scalability, agility, increase flexibility, higher efficiencies and reduces costs. Now a days many and many organizations relocate their applications and services to cloud

## II. CLOUD COMPUTING OVERVIEW

Cloud computing is becoming apparent or prominent in computer technology, that uses the internet and central remote servers for maintain information or data and application. Cloud is network or internet which is placed in remote location. Cloud computing gives shared services to

local servers or resources of storage. It is enabled to access the information or data from web enabled hardware. It provides the services through the internet or network.



F.g 1 Cloud computing diagram

Today Popular and trending technology is Cloud computing which is referred for storing and accessing of information or data via the internet or network instead of system hard drive. Current time monitoring the data or resources. Cloud Computing is nothing that all software of system applications and services stored into cloud. It gives a single, easy, and simple interface to the users and architecture is hidid. In this cloud computing has the three main segments: "Application", "Platforms," and "Infrastructure". Each one is gives the different purpose and different product in different environment for the business use.

Cloud computing has the different models to the users. Those are Public cloud, private cloud and hybrid cloud. These models are worked in different environment and different business ways. Now a days people are using the cloud computing in easy way. It is available for 24/7 there is no limited to use. Cloud computing have the largest environment to stores and accessing the data. Those data or information are reliability the authentication people or person to be used. The data are secured to be maintain.

### III. CLOUD COMPUTING SERVICE MODELS

Cloud computing offered the different types of services, Cloud computing can be defined the three types of layers: Software as a services (SAAS), platform as a Service (PAAS), and infrastructure as a Service (IAAS). These services are provides the various types services to the customer in low cost. Software as a services (SAAS) is an application which is interface between cloud and user. platform as a Service (PAAS) is provides the tools or building resources to software for build an application. infrastructure as a Service (IAAS) is not gives the services to customer it gives only the hardware (e.g., CPU, Monitor, Network tool, etc.,)

## A. Software as a services (SAAS)

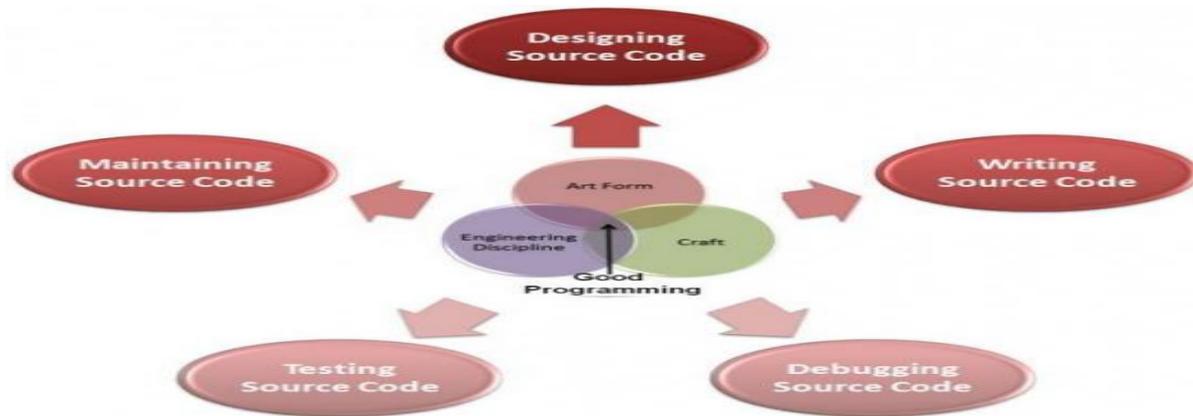
It is a distribution model for software in which applications are stored by cloud service provider and made available to end users via internet. SaaS is also called as “**On-Demand Software**”. In SaaS, the software and related data are centrally stored on the cloud server. SaaS is accessed by the end users. It is hosted as a service to the users who use it through the network or internet. When the application is accessed by the off-site, the user doesn't have to maintain it. SaaS takes the responsibility for development and managing the Information technology Infrastructure (operating system, servers, database, data center place, access of network, etc.)



## B. PLATFORM AS A SERVICE (PAAS)

Platform as a service (paas) is another application and delivery model which supplies all the resources required for the purpose of building applications and services totally from the network, without the network we cannot download or install software. It is a platform of developer programming which is involved for developing the program, testing, running, and maintaining the applications. A programmer is able to create the application as well as implement it directly into this layer very easily.

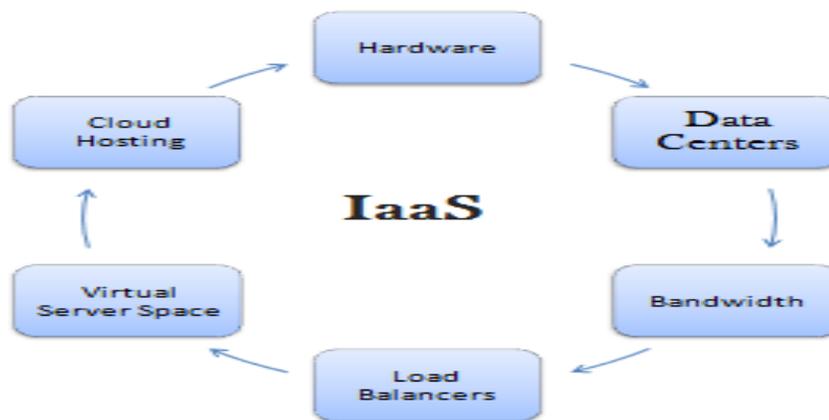
## Platform as a service (PaaS)



F.g., 3 Platform as a service (PaaS)

## C. INFRASTRUCTURE AS A SERVICE (IAAS)

Infrastructure as a Service (IAAS) is the layer of cloud computing platform provides the servers, networking, processing, storage, virtual machines and other resources. Users can access the resources through the internet.



F.g., 4 Infrastructure as a Service (IAAS)

It is earlier called as Hardware as a service (HaaS), based on the model. Above layers are provides the service to the customer but in this layer offers the hardware. It is allows the rent resources such as server space, network tool, Memory , CPU, storage devices. Bandwidth specifies range of the frequency for the storage space. Load balancers used to balance the memory or the way to send and receive the data.

## IV. CLOUD COMPUTING DEPLOYMENT MODEL

### A. PUBLIC CLOUD

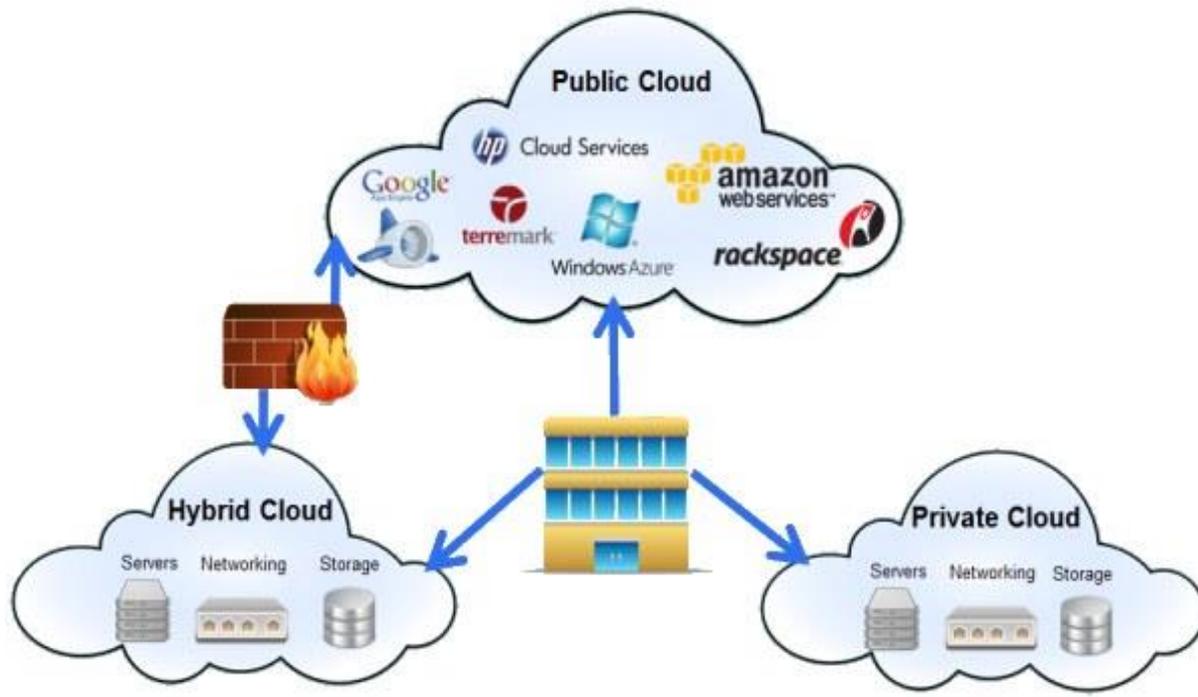
Public cloud is one of the model in cloud computing which is provide the services and allows the accessibility of the computer to the public. There is no restriction to use the system or software. Example: Google, Microsoft, IBM, Amazon etc. it has the low cost as compared to private or hybrid cloud, because it sends the same data or information with large number of customer. It provides large number of resource from various locations, in case any one of the resource will fail, public cloud can employ another one. it is very flexible to use and have the location independent.

### B.PRIVATE CLOUD

Private cloud is also one of the model in cloud computing then it gives the accessibility of systems and services to operated the particular organization. It will managed by the third party or managed internally. Example: Library management system. it has the high security and privacy then it shared the data or information within the organization. Private cloud has some restriction to use which is more cost than the public cloud. It is scalable resources and virtual applications gies by the cloud vendor. Private cloud for the end users to access the applications within the organization.

### C.HYBIRD CLOUD

Hybrid cloud is combination of the public and private cloud. There is performed some critical activities in private cloud and Non-critical activities are performed by the public cloud. It gives the both public and private features of cloud scalability. It gives secure resources which has the less cost. Networking becomes complex because of private and public cloud. It gives the more control for secure of the data and application and gives the permission to access the system from different platforms via the internet. Hybrid cloud can describe the combining of configurations for a local devices.



F.g., Deployment Model diagram

## V. CONCLUSION

Cloud computing visualized as the next generation of IT enterprise. It noticed the IT market . it provides real benefits to the organization searching a competitive in today's economy. Many more organization or companies moved to this area, it provides attractive pricing, the ability to free for the staff and their other duties. Cloud computing made a revolution in IT infrastructure and economical area. Cloud computing has the many models and services to gives the services to the customer. It is large storage devices and act as a server. Data or information can be stored and maintain in secure way. Using Gmail has the google drive to stored the information and user friendly applications are using the cloud computing. It gives the services to end user , public and within the organization it is worked as a various roles. User can used it easily and stored the data in secure way. Many of the organization will adopt the cloud computing then if the issued are solved. Cloud computing are safted to use in front. It gives the proper and regular services to user and organization. Using cloud computing there is no limit to use the internet we can access the information or data get backup. Stored the data and applications in cloud the way of backup. The data are stored in cloud.

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