

TechTrends



Vision :

To empower girls of diploma computer engineering to excel in IT Industries and serve the society.

Mission:

- To strive for academic excellence and professional competence among students and staff.
- To encourage innovative ideas among students to enhance their entrepreneurship skills.
- To provide high tech educational resources and supportive infrastructure.

Cloud Computing

Cloud Computing provides us a means by which we can access the applications as utilities, over the Internet. It allows us to create, configure, and customize applications online.



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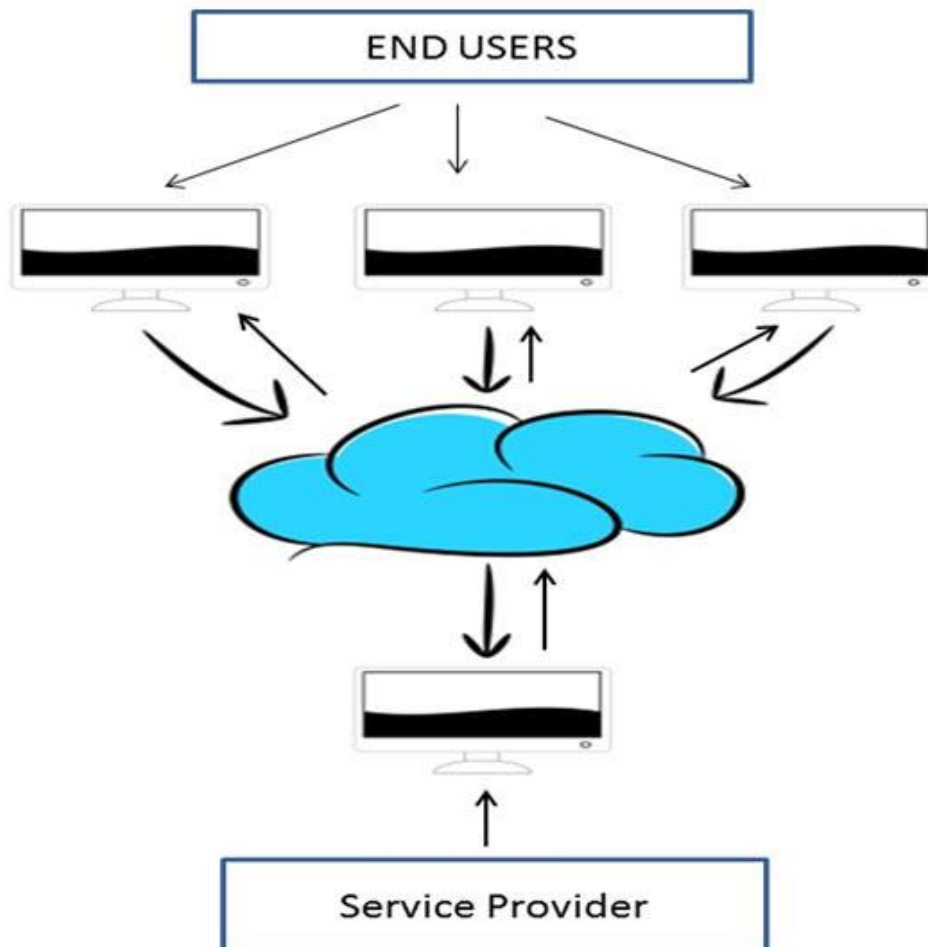
What is Cloud?

The term Cloud refers to a Network or Internet. In other words, we can say that Cloud is something, which is present at remote location. Cloud can provide services over network, i.e., on public networks or on private networks, i.e., WAN, LAN or VPN. Applications such as e-mail, web conferencing, customer relationship management (CRM), all run in cloud.

What is Cloud Computing?

Cloud Computing refers to manipulating, configuring, and accessing the applications online. It offers online data storage, infrastructure and application.

We need not to install a piece of software on our local PC and this is how the cloud computing overcomes platform dependency issues. Hence, the Cloud Computing is making our business application mobile and collaborative.



Need of Cloud Computing

Adopting a cloud computing strategy can help businesses conduct their core business activities with less hassle and greater efficiency. Companies can maximize the use of their existing hardware to plan for and serve specific peaks in usage. Thousands of virtual machines and

applications can be managed more easily using a cloud-like environment. Businesses can also save on power costs as they reduce the number of servers required. And with IT staff spending less time managing and monitoring the data centre, IT teams are well placed to further streamline their operations as staff complete more work on fewer machines.

Types of Clouds

There are four different cloud models that you can subscribe according to business needs:

Private Cloud

Community Cloud

Public Cloud

Hybrid Cloud

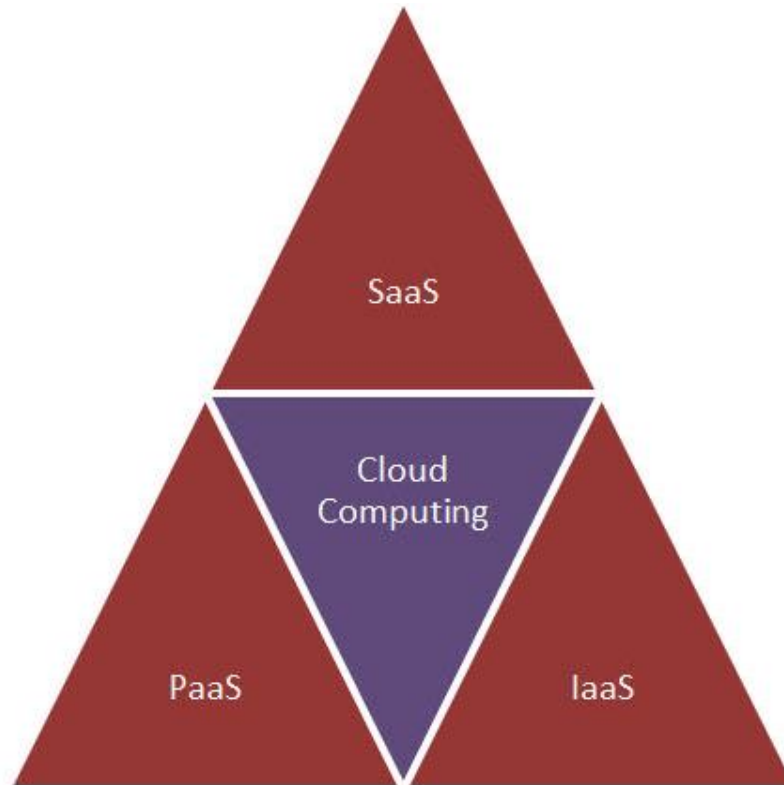
1. Private Cloud: Here, computing resources are deployed for one particular organization. This method is more used for intra-business interactions. Where the computing resources can be governed, owned and operated by the same organization.
2. Community Cloud: Here, computing resources are provided for a community and organizations.
3. Public Cloud: This type of cloud is used usually for B2C (Business to Consumer) type interactions. Here the computing resource is owned, governed and operated by government, an academic or business organization.
4. Hybrid Cloud: This type of cloud can be used for both type of interactions - B2B (Business to Business) and B2C (Business to Consumer). This deployment method is called hybrid cloud as the computing resources are bound together by different clouds.

Cloud Computing Services

The three major Cloud Computing Offerings are

- Software as a Service (SaaS)
- Platform as a Service (PaaS)
- Infrastructure as a Service (IaaS)

Different business use some or all of these components according to their requirement



SaaS (Software as a Service)

SaaS or software as a service is a software distribution model in which applications are hosted by a vendor or service provider and made available to customers over a network (internet).

SaaS is becoming an increasingly prevalent delivery model as underlying technologies that supports **Service Oriented Architecture (SOA) or Web Services**. Through internet this service is available to users anywhere in the world.

PaaS (Platform as a Service)

Platform as a service, is referred as PaaS, it provides a platform and environment to allow developers to build applications and services. This service is hosted in the cloud and accessed by the users via internet.

To understand in a simple terms, let compare this with painting a picture, where you are provided with paint colors, different paint brushes and paper by your school teacher and you just have to draw a beautiful picture using those tools.

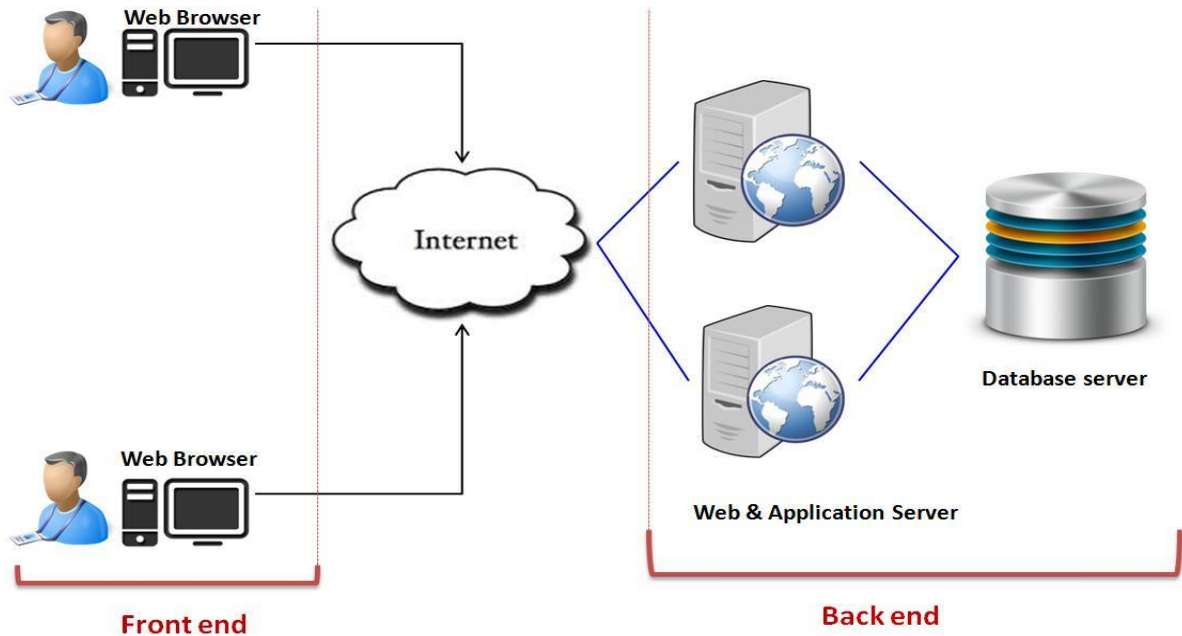
IaaS (Infrastructure as a Service)

IaaS (Infrastructure As A Service) is one of the fundamental service model of cloud computing alongside PaaS(Platform as a Service). It provides access to computing resources in a virtualized environment “the cloud”

on internet. It provides computing infrastructure like virtual server space, network connections, bandwidth, load balancers and IP addresses. The pool of hardware resource is extracted from multiple servers and networks usually distributed across numerous data centers. This provides redundancy and reliability to IaaS.

What is Cloud Computing Architecture?

Let's have a look into Cloud Computing and see what Cloud Computing is made of. Cloud computing comprises of two components front end and back end. Front end consist client part of cloud computing system. It comprise of interfaces and applications that are required to access the cloud computing platform.



While back end refers to the cloud itself, it comprises of the resources that are required for cloud computing services. It consists of virtual machines, servers, data storage, security mechanism etc. It is under providers control.

Cloud computing distributes the file system that spreads over multiple hard disks and

machines. Data is never stored in one place only and in case one unit fails the other will take over automatically. The user disk space is allocated on the distributed file system, while another important component is algorithm for resource allocation. Cloud computing is a strong distributed environment and it heavily depends upon strong algorithm.

Benefits of Cloud Computing

Following are the benefits of cloud computing:

1. Lower IT infrastructure and computer costs for users
2. Improved performance
3. Fewer Maintenance issues
4. Instant software updates

5. Improved compatibility between Operating systems
6. Backup and recovery
7. Performance and Scalability
8. Increased storage capacity
9. Increase data safety

References

1. <http://www.marketersmojo.com/5302/how-does-cloud-computing-work-and-whatthe-heck-is-it/>
2. http://en.wikipedia.org/wiki/cloud_computing
3. <http://www.saasdir.com/news/showNews.aspx?ID=33174>
4. http://www.businessweek.com/technology/content/nov2007/tc20071116_379585.htm



QUIZ (3)

Aptitude Questions

- | | |
|--|---|
| <p>1. Today it is Thursday. After 132 days, it will be</p> <p>A. Monday
B. Sunday
C. Wednesday
D. Thursday</p> | <p>2. What is the average of first five multiples of 12?</p> <p>A. 36
B. 38
C. 40
D. 42</p> |
|--|---|

Answer of Last Quiz (2)

1. **Option C** Explanation : There are two alphabetical series here. The first series is with the first letters only: STUVW. The second series involves the remaining letters: CD, EF, GH, IJ, KL.
2. **Option B** Explanation : This is a simple division series; each number is one-half of the previous number. In other terms to say, the number is divided by 2 successively to get the next result.



Photo Gallery

Drama Name : Awareness on Mobile Phone Additcion in Young generation.

Drama played by:-Computer Department of Government polytechnic for Girls, Surat on 11/10/2019 Friday

Drama Venue : Paniben Ramjibhai Contractor Primary School, Nanpura, Surat





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