

**On demand self service:-** Consumer can get provided computing capabilities by himself without human interaction with service providers.

**Broad network access:-** can be use over the network with any device such as laptops, Tablets, Mobile phones.

**Resource pooling:-** As Cloud computing follows multi-tenancy to serve multiple consumers. assigns space on demand

**Rapid elasticity:-** it means resources that are provided to consumer that can be elastic.

**Measured Service:-** usage resources can be reported and measured by appropriate device for each consumer for utilised services.

### Need of Cloud Computing

Now question arises that what is the need of cloud computing? Let's say I am at an executive position in a company. so what should be my work? one of my particular responsibilities is to make sure that all my employees have the specific software and hardware which they need to do their jobs. it's not enough to buy computers for everyone, besides buying computer system for everyone I should also have to buy software including their licence for their employees required for their particular jobs. now problem occurs that whenever I hire a new employees I would have to make him available more software and licences for his use. But Doing this involves spending huge amount of money. for avoiding this, instead of installing a suite of software for each computer, I should only have to load one application. This application would allow all the workers to log in or log out into a web-based service that hosts all the programs that user need for her or his job. Web based application that is remote machines owned by that company

Would run all from word processing to analysis of data to an

Usenet network was the best example, it was created in 1979.as it was connected via internet ,entire content was hosted on each network. Messages were sent to peer computers .If a user connects to any single UseNet server he had the access to all the messages posted to every single individual server .

Not every time peer to peer is used, world wide web develops and brings it back to the client/server model. on world wide web ,all content and control is centralized and clients have no control during the process.

Then comes the distributed computing , which was a subset of peer to peer model. where all the computers were connected together also defines cycle sharing and shared their resources whenever it is needed on large and intensive heavy projects. It also the increased computing power. our computer is capable to do tremendous computing work of 24 hours full day work ,7 days of week. But mostly people don't utilize their computer 24/7 due to which a good portion of computer resources get unused by user. Some is used by computing resources.

To use a computer for distributed computing project a software is installed on the system to run various activities when system is kept unused. that result is combined to computing network with similar results from the other computers in project. let us take an example of genetic research where large amount of computing power is required which might take years to solve the mathematical equations .to obtain the results early ,Large number of computers are connected together to an individual computer system.In 1988 Digital Equipment Corporation(DEC) developed a software that distributed the work of taking out factor of large numbers among workstations.By 1995 utilization of software came from 100 digit factorization to 130 digit factorization.many distributed computing projects like distrubuted.net involved

large amount of data. it can be a database of collection of contents of cd or dvd collections. database not only stores data but also mechanize data entry, analysis, retrieval. we the user only see the front end of database that pulls informations.

Online database means a network where data is stored on a single computer or server connected to a network which is accessible to all computers connected to that network. which can be accessed by any authorised user from any location via internet connection. web based database can be shared easily with a large number of users worldwide. If database will be on cloud then ,If anyone updates the database changes will be reflected everyone who is accessing it.

For example human resource department of Spice labs can be able to see employee's information in Delhi as easily as HR staffs in Mumbai as well as HR managers travelling to various colleges for job recruitment.

Some Database software program delivers sophisticated softwares are Microsoft access, Oracle and others but its keeps developing as no major database software developers providing web based database applications yet.

Some web based database applications are :-

**Blist:-** Easy to use database application, made for non technical peoples. Blist helps to make database robust. as well as we can share database with other users. user can add or delete records in database.

**DabbleDB ([www.dabbledb.com](http://www.dabbledb.com)):-** we can add new records or delete old ones with dabbleDB. we can display our data in number of different manners which also includes spreadsheets table. we can generate graphs, calenders, maps. dabble offers 3 ways to share our data .they are

1. Pages option:- collect data from other users database

2.Users options:- used to access raw data in database

3.scheme option:-uses DabbleDB JavaScript API to let others user interact with database on websites

Quick Base:- (quickbase.intuit.com) it is the oldest and most featured online database available nowadays. its came from company having build names from quickbooks.quickbase lets us design our own web based database application.its very sophisticated.quickbase is an online workgroup application which helps to organize and share and track information as well, which could improve our team productivity. we can start with a readymade application and after completion we can change it according to our need .

There are many online web based database application they are :-MyWebDB,Cebse, Lazybase,TeamDesk(like quick base but delivers Advanced Features like

billing,sales,marketing,human resources, customer support, predefined formats),Trackvia,Zoho DB & Reports.

But above all if we are working for large companies the most prominent web based application is QuickBase,as it is in market since longer time and developed by a software company,Intuit.



desktop.But what if we need to use somewhere else where we don't have that preseentation to edit.uploading or download presentation will be a slow process. to reduce this problem online presentation are developed so that we can take it to anywher,even we can see it on standing beside a road.Preparing presentations online is a good step to use it from anywhere. But for creating a presentation we need some graphics and effects which might be different on web based applications as Microsoft power point is a fully featured program, so we should be sure enough before switch to web based applications.

Some Web Based Presentation Applications are:-



would happen if all the web based applications like spreadsheets, presentations, videos, calendars all will be together in a single browser window. this type of features is called mini operating system replicating basic features of an operating system in cloud called web based desktops or webtops. web tops has GUI (graphic user Interface). the best feature of webtop is we can have our own personalized computing environment in our computer. we can use it anywhere. it makes our work easier. some online applications are:-

ajaxWindows, deskjump, Desktoptwo, EYEOS, GHOST, Starforce, Glide.

Applications of Cloud Computing Nowadays which we come to see is:-

Web mails Gmail, social networking site like face book and twitter, Wikipedia, Blogger, Yahoo and G+ chat whatsapp weChat, online sales like flipkart, ebay, amazon, forums like Topix.com. In banking cloud computing is used where many computers are there and every computer's database is kept as server and software as well applications are kept at client machines. When need client access servers for database. large companies, automobile companies, oil companies, as well as retail stores also use cloud computing software used in cloud computing are known as ERP as this provide complete business solutions and it is also customizable. Banks like HDFC and ICICI use ERP software and customize it according to their needs.

For understanding how cloud computing works in case of Gmail and face book and Wikipedia we need to know about cluster computing and grid computing.

We know that there are many servers that are connected to client computer. but if the load on server increases then we need to add a new homogenous server or a big new server by



Provides simple web service to retrieve or store unlimited amount of data on the web site. we can read write or delete object having memory size from 1 byte to 5 TB(tera byte) each. Each object(public or private) is assigned a develop key to store and retrieve.

To manage database on Amazon we use ARDS(Amazon relational database service)



GoogleApp Engine:- Google is leading company in web based applications. Google app engine develop the same web application and infrastructure which Google uses. It provides fully integrated environment for application. We only need to do is to develop our application with the help of Google API and Python Programming Language, and uploaded to our the Engine. It offers robust developing environment. It support all web technologies commonly. web serving is dynamic. Load balancing is automatic. API available for authentic user. additionally. Google App Engine Can run on any PC providing fully featured environment for development. Using is free of cost. This app engine Provides 500 Mb of storage and Bandwidth of about 5 millions pages a user can view in a single minth. If we need more storage and bandwidth we need



to pay for that service.

☐ Use in mobile OS Apps like Android, iPhone, Windows

◆By Optical Engineers to offer High Bandwidth. By Website developer, Social Media developing, Network Security specialists, IP Engineers.

Preview from Notesale.co.uk  
Page 45 of 46