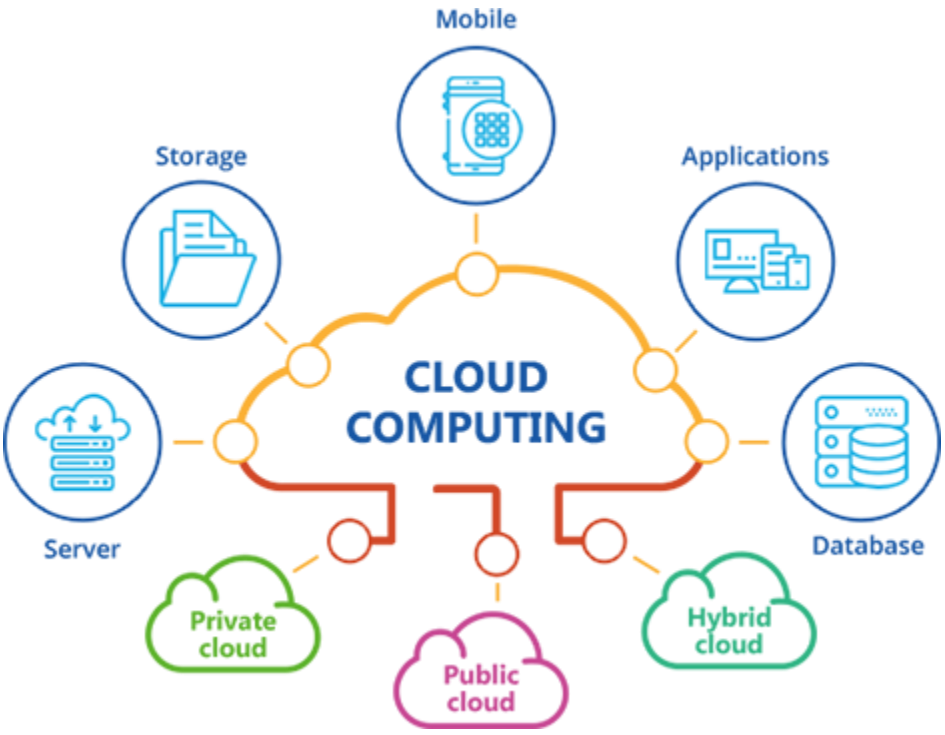
What is cloud computing ?

The National Institute of Standards and Technology (NIST) defines Cloud Computing as "Cloud Computing is a model for enabling ubiquitious, convenient, on-demannd network acess to a shared pool of configurable computing resources (for example, networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction."



Introduction

- Computing Models
- Evolution of Cloud Computing
- Cloud Business

Computing Models

- Desktop Computing
- Client-Server Computing
- Cluster Computing
- Grid Computing
- Cloud Computing

Desktop Computing

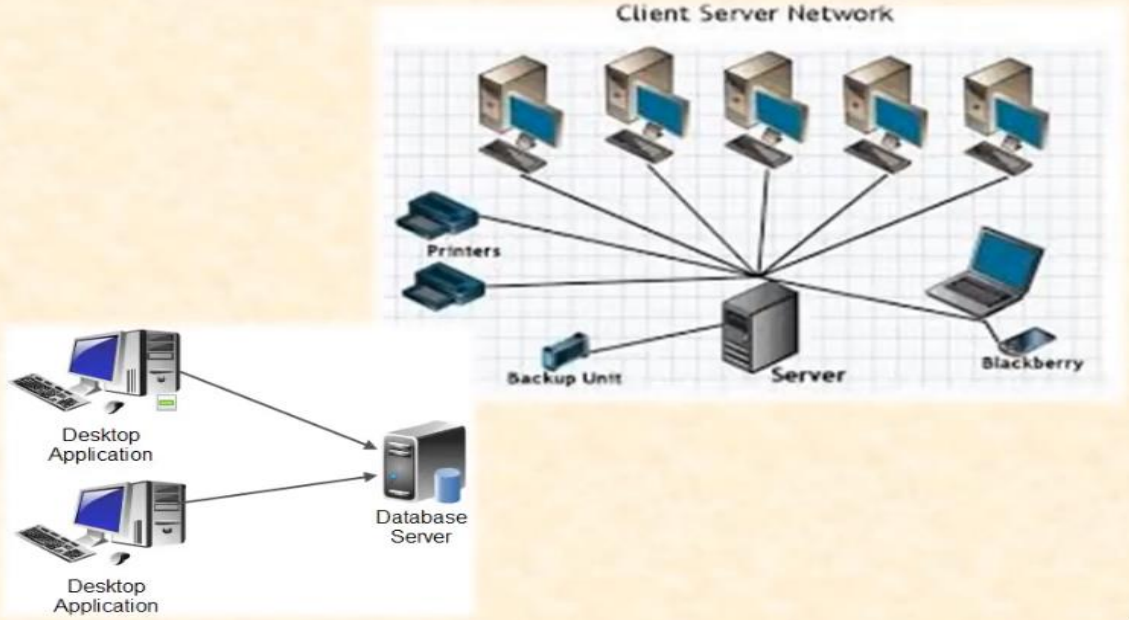
Desktop Computing

1. Personal
2. Professional
   - Engineers
   - Artist
   - Authors
   - Doctors
   - Programmers
3. Office
4. Desktop Publishing

Software

1. MS-Office
2. AutoCAD
3. Photoshop
4. Illustrator
5. 3DStudio Max
6. Dreamweaver
7. Net Beans
8. Visual Studio
9. CMS

Client-Server Computing



Client-Server Computing

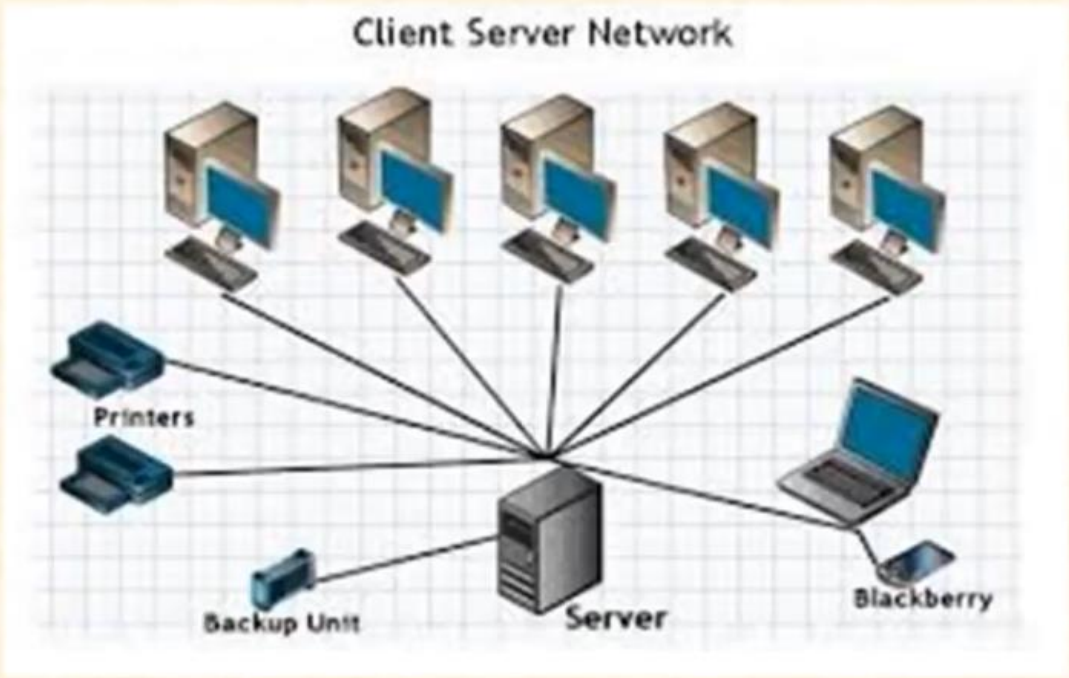
- Banks
- Retail Stores
- Marketing & Sales
- Distribution
- Aviation Companies
- Automobile Companies
- Oil Companies

Software

1. Accounting/Finance
2. Sales ERP
3. CRM
4. Distribution ERP
5. Manufacturing ERP

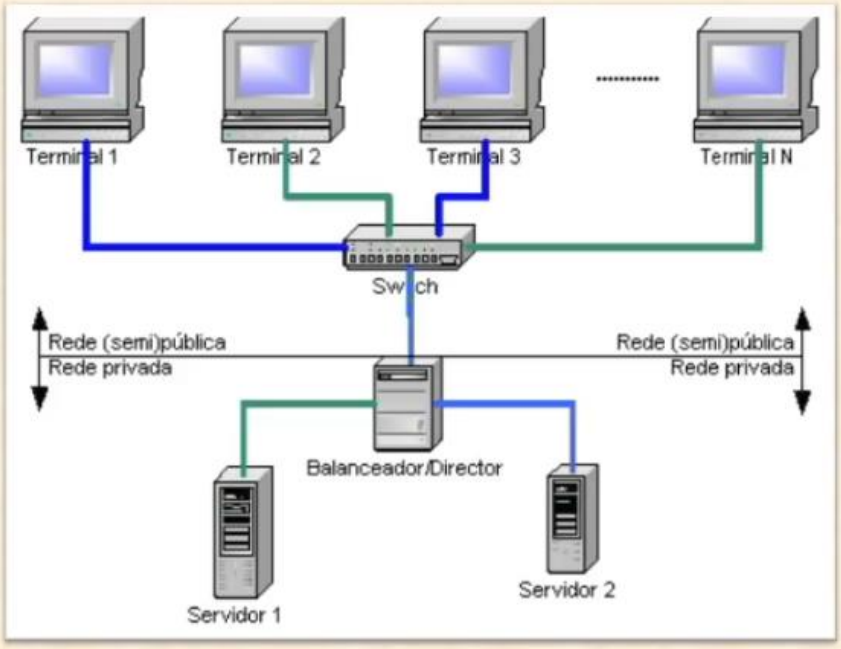
- SAP
- Oracle Apps
- Microsoft Dynamics

Cost

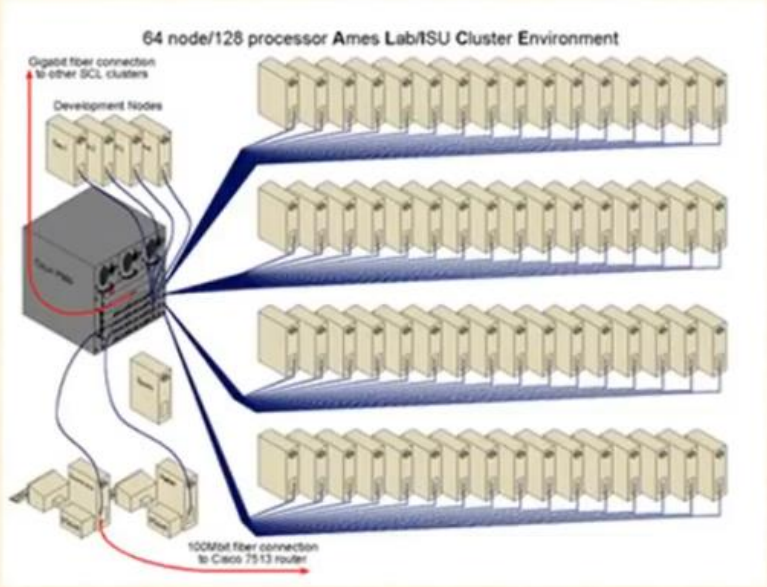


Cluster Computing

Homogenous Servers



Cluster Computing

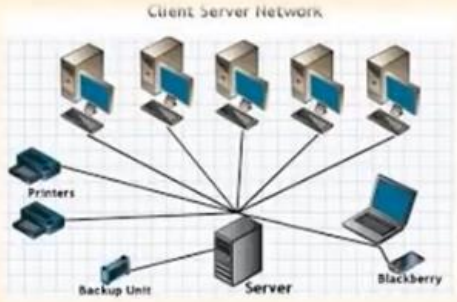


Cluster Computing

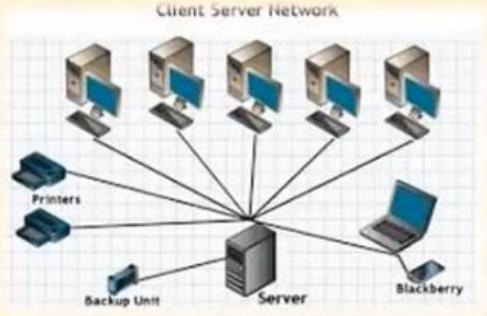
Grid Computing

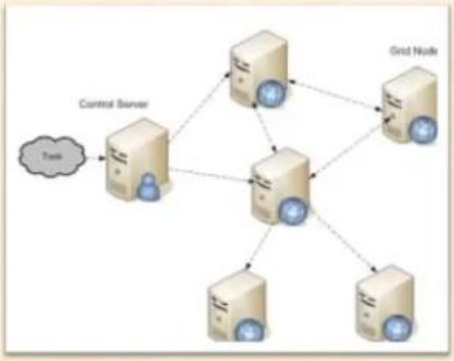
- **Different Locations**

Delhi Branch

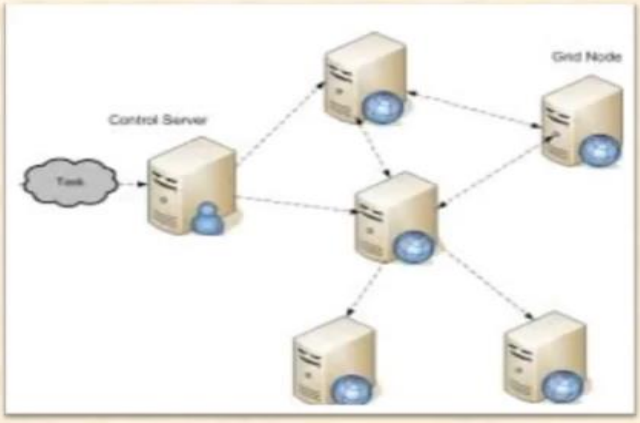


Bangaluru Branch





Grid Computing



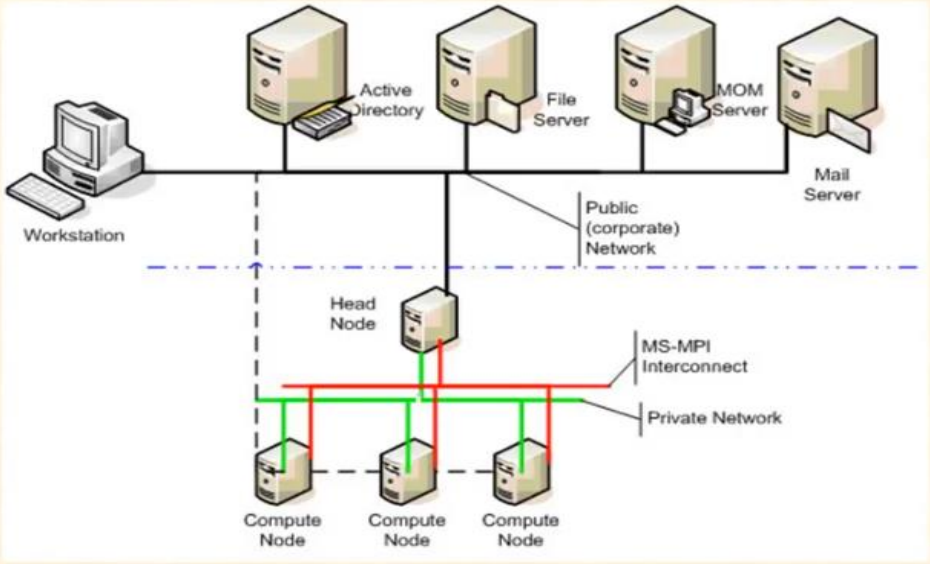
Heterogeneous Servers

- Different Operating Systems
- Different Application Servers

1. Database Server
2. Mail Server
3. Web Server
4. File Server

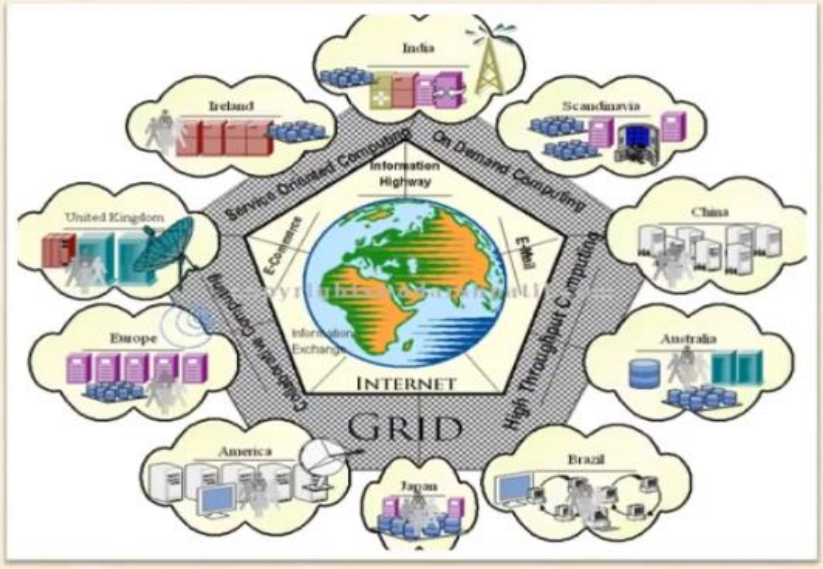
Grid Computing

- **Different Services**



Cloud Computing

- Combination of Cluster and Grid Computing



Cloud Computing

Companies who Own Cloud

- Toyota
- Wal-Mart
- TATA Group
- Citi Bank

Infrastructure Maintenance

- IBM
- Dell
- Intel
- HP
- Cisco
- Sun

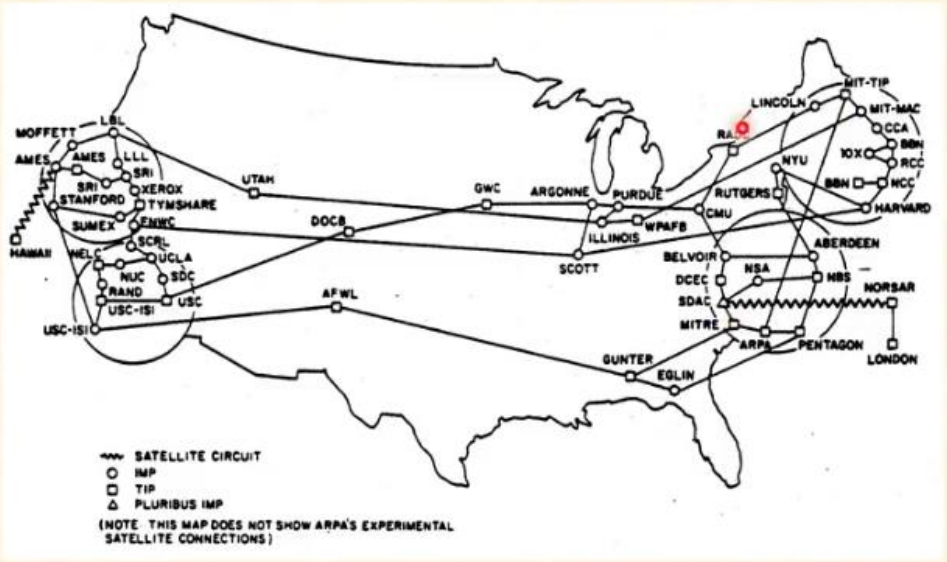
Software Companies

- SAP
- Oracle Apps
- Microsoft Dynamics

Evolution of Cloud Computing

Evolution of Internet

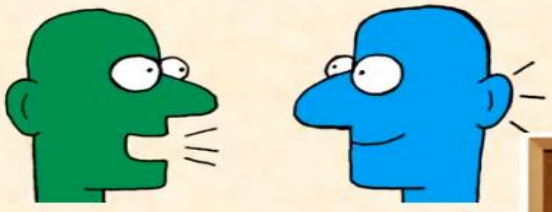
ARPANET



History Of Internet

- ARPANET Project started in 1969
- Email service introduced 1972
- World wide web born and made public 1991

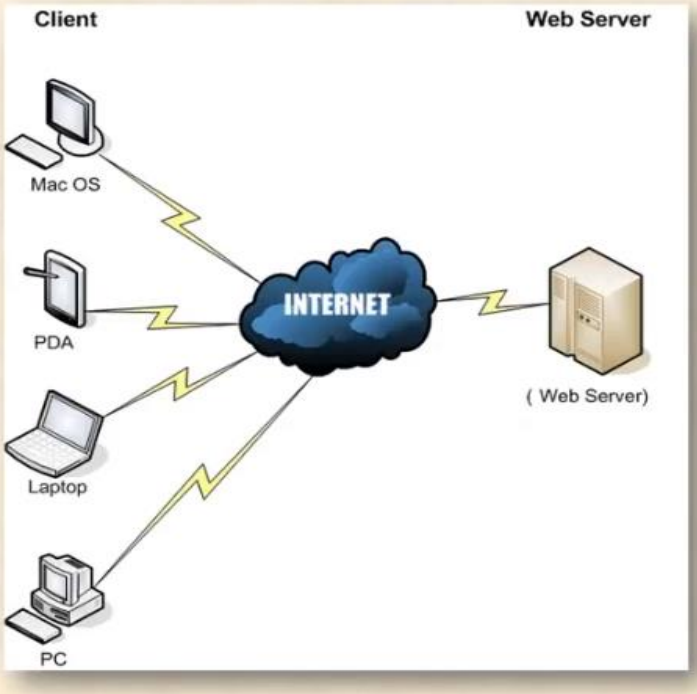
Email vs Web



Email
Like one-to-one

Website
Like Notice Board

Server in Internet



Public Internet

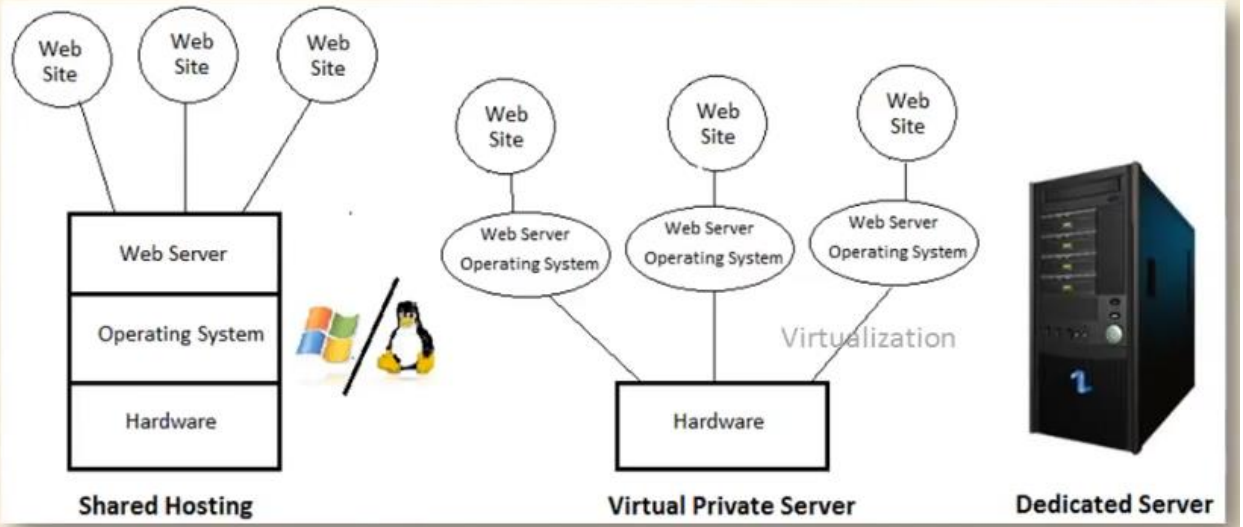
dot-com bubble in 2000

Hosting Service Providers

Third Party Server

- GoDaddy
- Dream Host
- Blue Host

Types of Hosting Services



Growth of Contents

- Contents plays key role in internet
- Let internet users write the contents

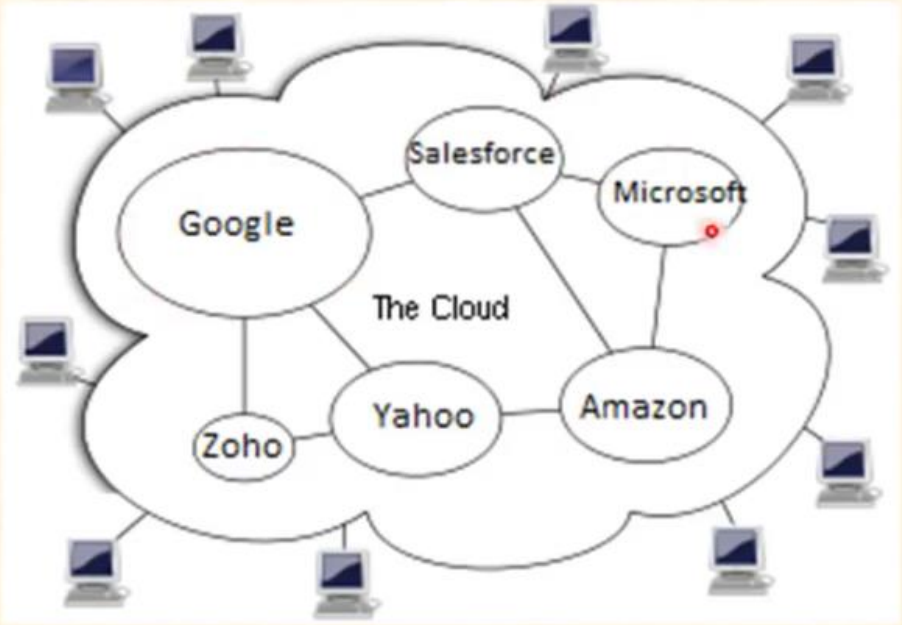
Free Internet Services

- Email Gmail
- Blogs Blogger
- Wikis Wikipedia
- Forums topix.com
- Chat Yahoo Chat
- Social Networking Facebook
- Online Sale eBay , amazon

Data Centres

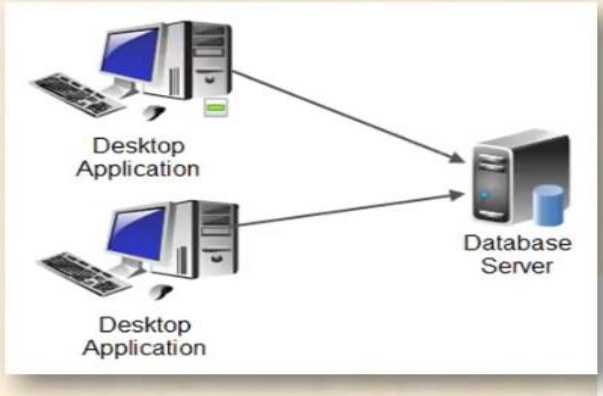
- Yahoo
- Google
- Amazon
- Microsoft MSN
- Facebook
- Twitter
- eBay

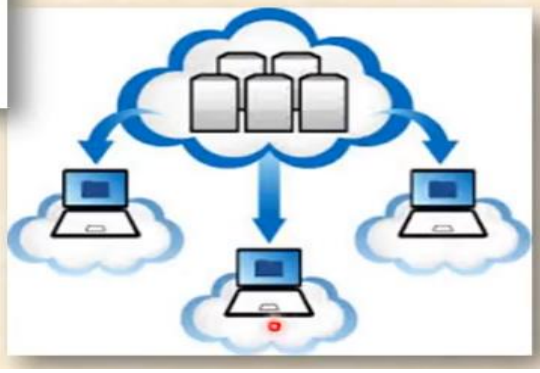
Internet as Cloud



Internet as Cloud

Data in Cloud





Cloud as Business

Cloud Services

Flashback

Cloud = Cluster + Grid

Private Clouds

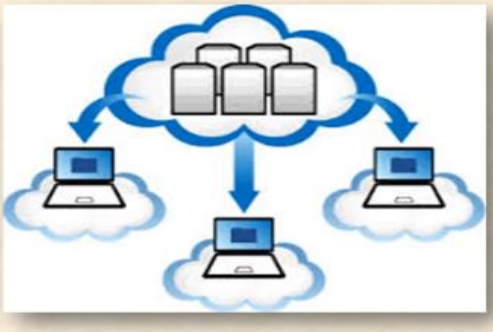
- Toyota
- Citi Bank
- Wal-Mart

Clouds in Internet

- Google
- Microsoft
- Salesforce
- HP
- IBM

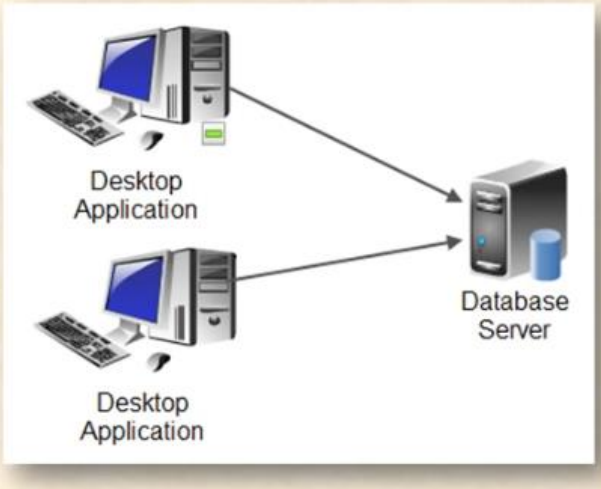
Flashback

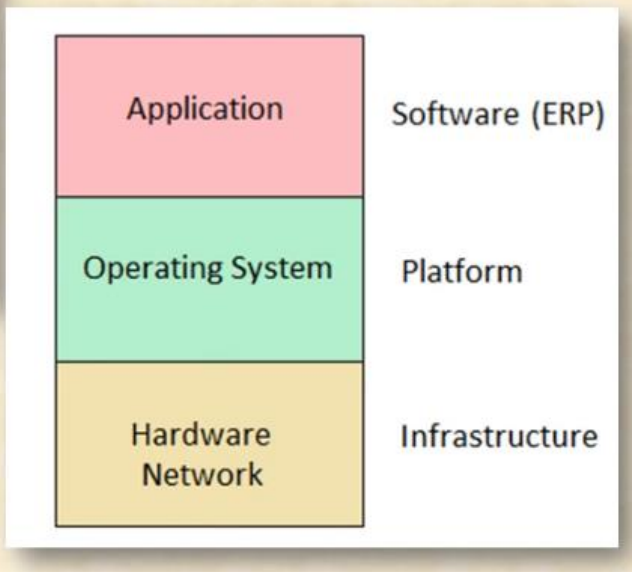
Rented - Shared Hosting For Websites



Rented Cloud for Client-Server, Business Application(ERP)

Server Requirement





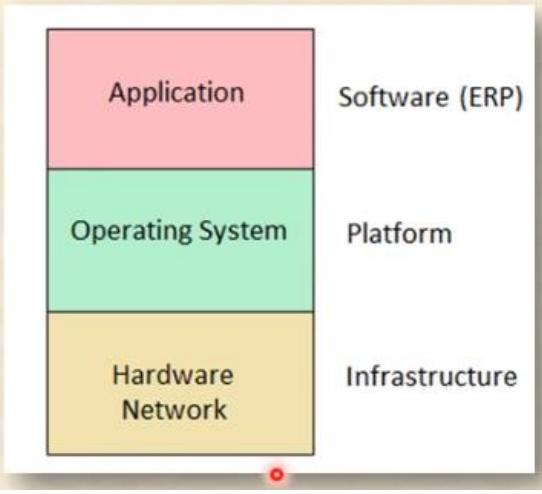
Example

Just Space

Space & Decoration

Space, Decoration and Catering

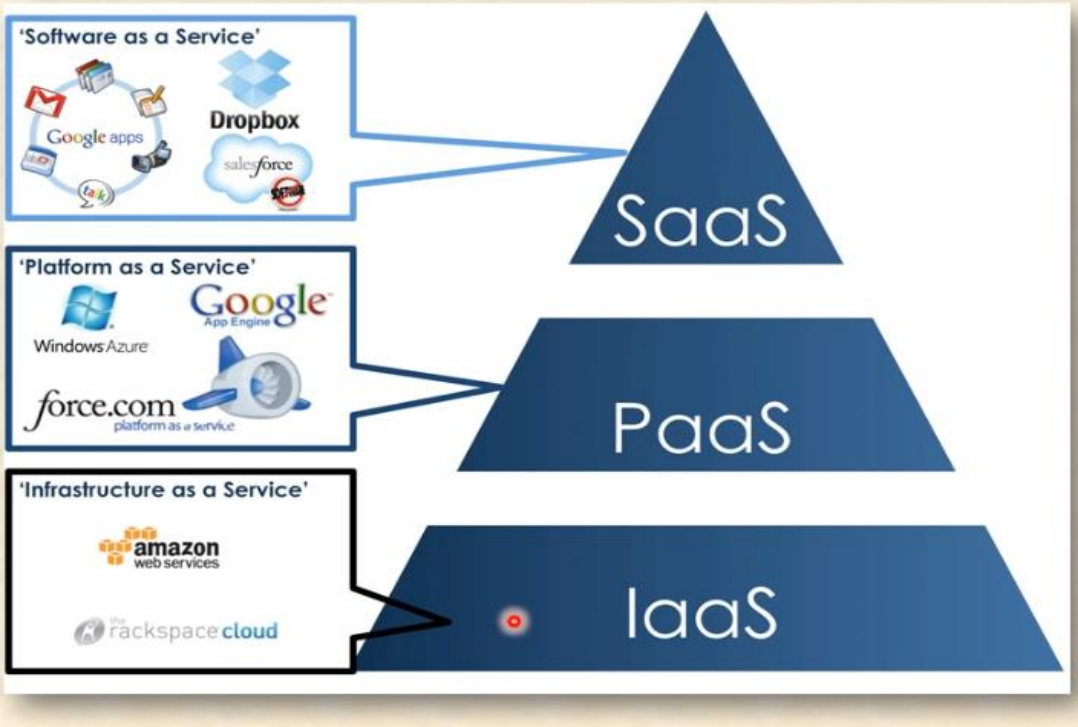
Choices for Cloud Server



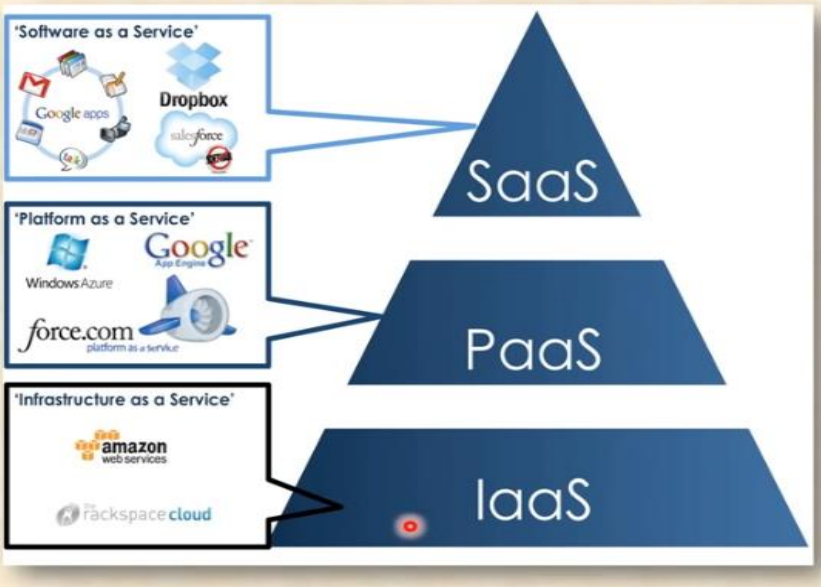
Choices

1. Just Infrastructure **(IaaS)**
2. Infrastructure + Platform **(PaaS)**
3. Infra + Platform + Software **(SaaS)**

Cloud Services



Cloud Jobs



Admin

Select , Customize & Migrate

Develop , Deploy & Migrate

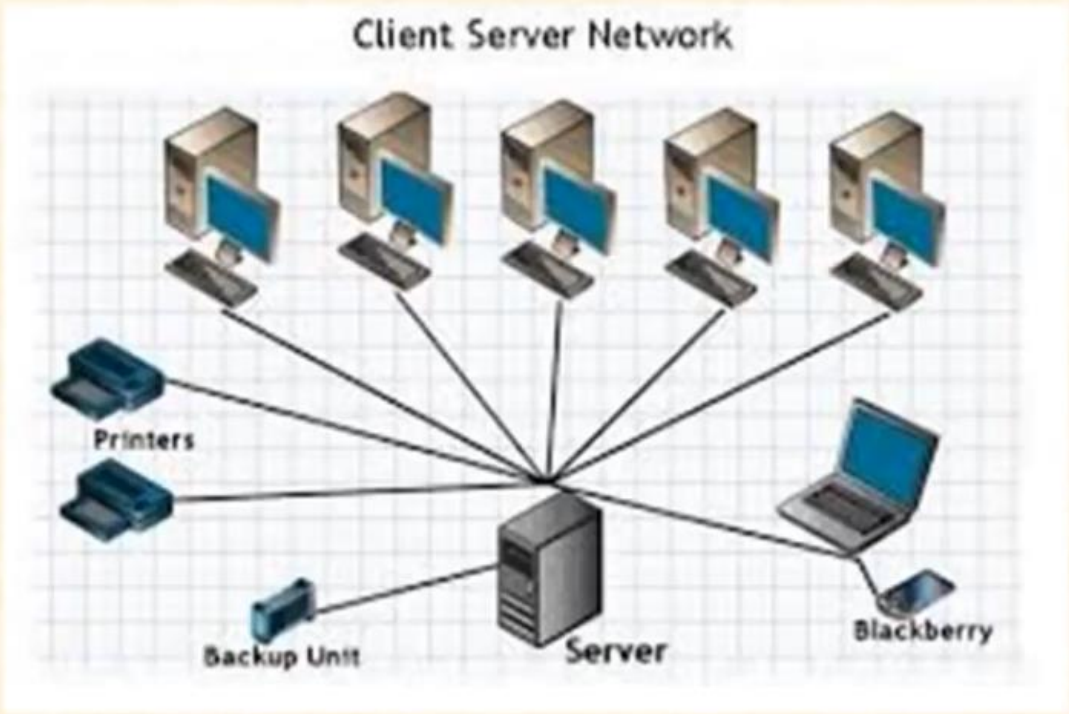
Configure , Deploy & Migrate

Cloud Computing Benefits

Benefits

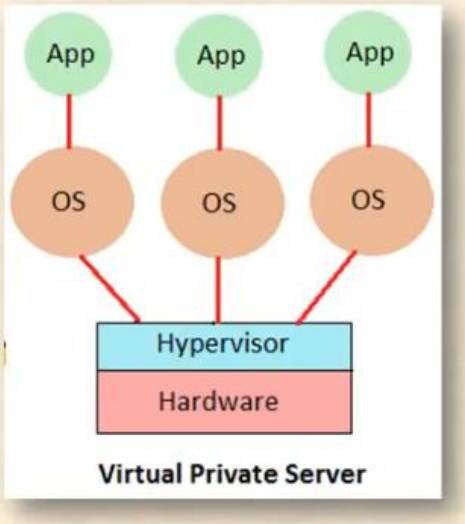
- Cost
- Device and Location Independent
- Virtualization
- Multi-Tenancy
- Reliability
- Security
- Scalability or Elasticity (on-demand Resources)
- Maintenance
- Software Delivery

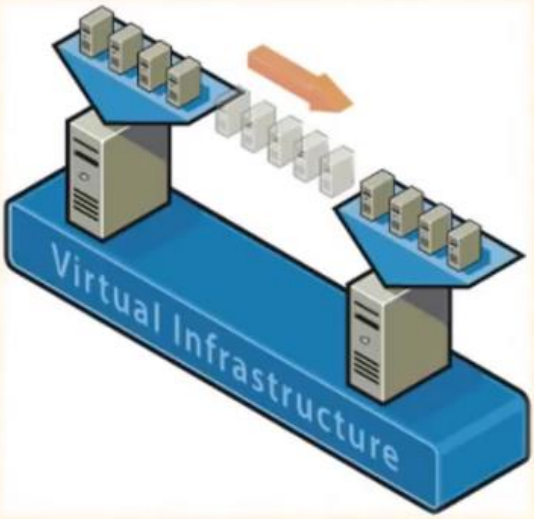
Cost



Access from anywhere

Virtualization & Multi-Tenancy

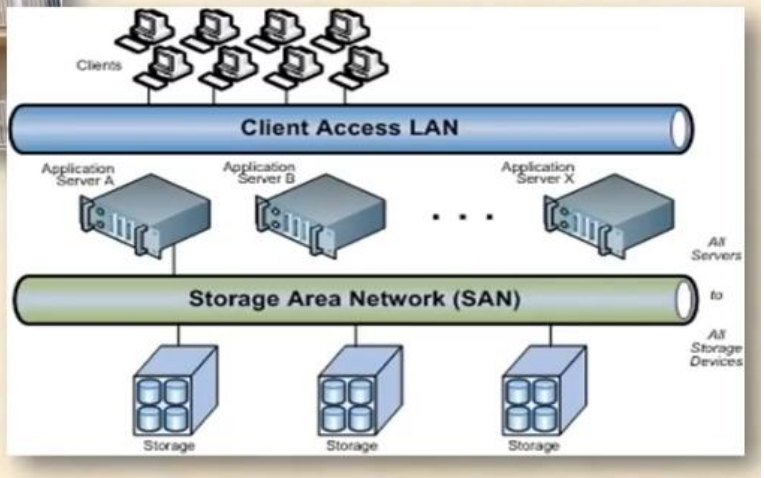




Hypervisors

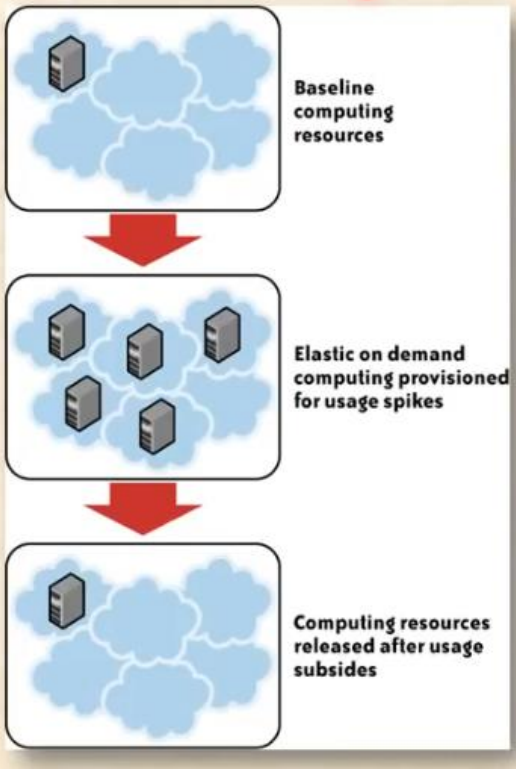
- VMware
- Citrix
- Window 2008

Multi-Tenancy



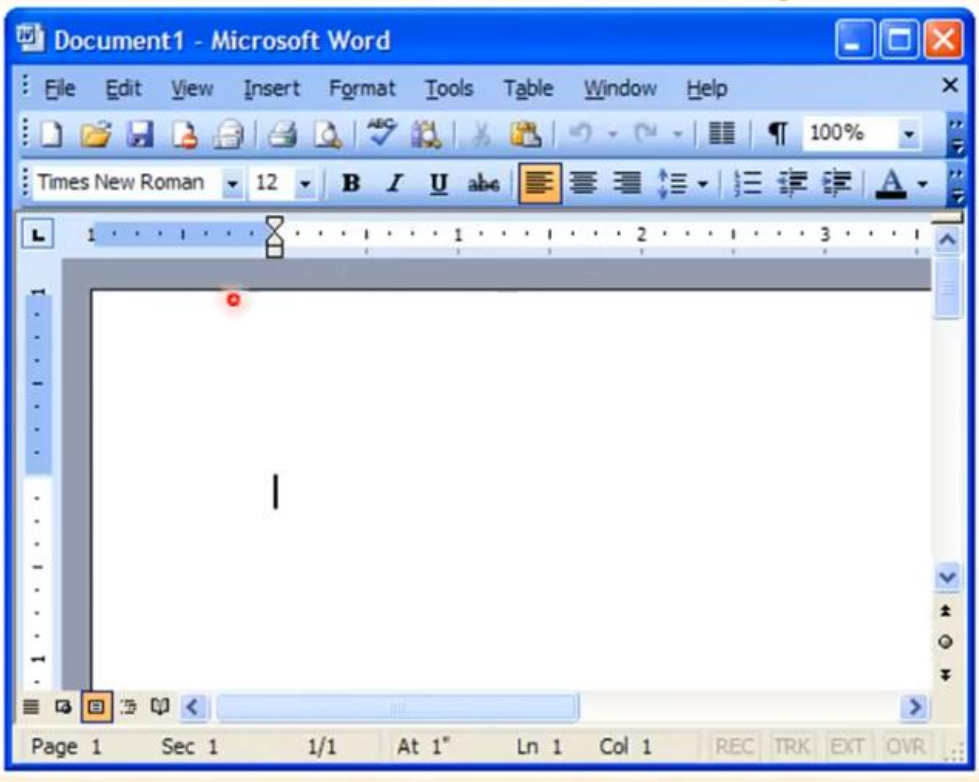
Reliability and Security

Elasticity & Maintenance



Software Delivery

Software Delivery



Software Delivery

http://office.microsoft.com/en-IN/