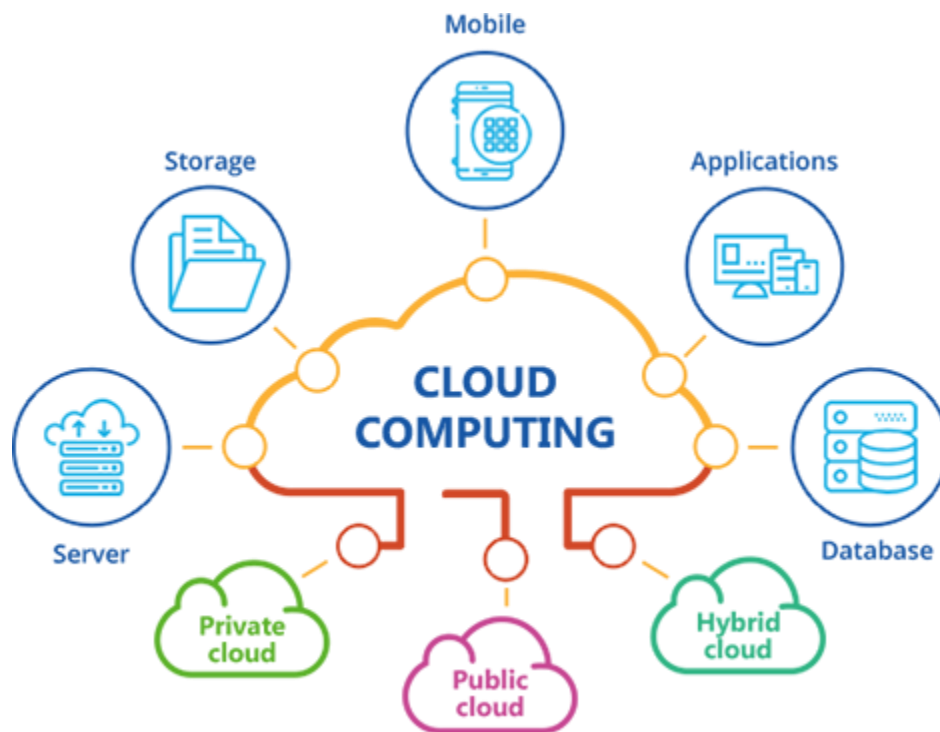


What is cloud computing ?

The National Institute of Standards and Technology (NIST) defines Cloud Computing as “Cloud Computing is a model for enabling ubiquitous, convenient, on-demand network access 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

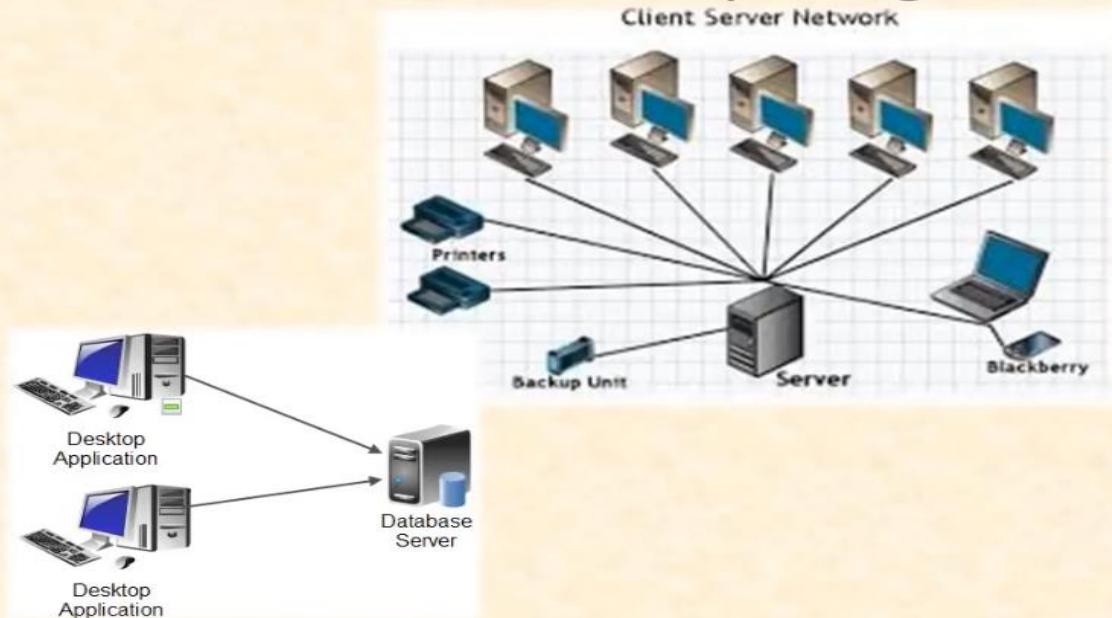
3. Office

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



Ac

Client-Server Computing

Banks

Retail Stores

Marketing & Sales

Distribution

Aviation Companies

Automobile Companies

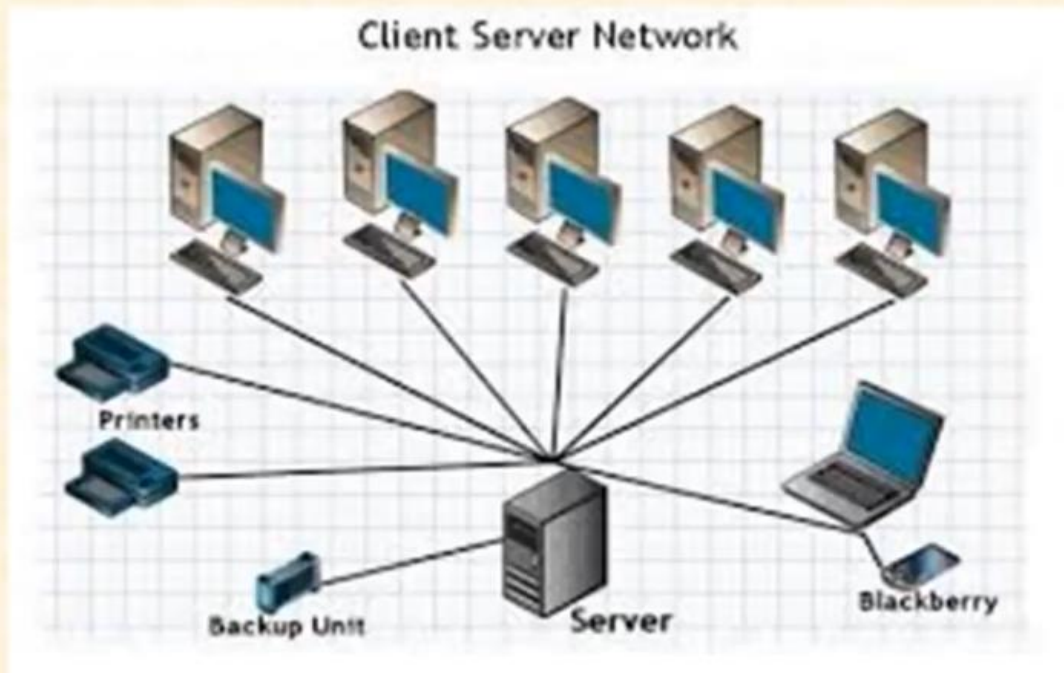
Oil Companies

Software

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

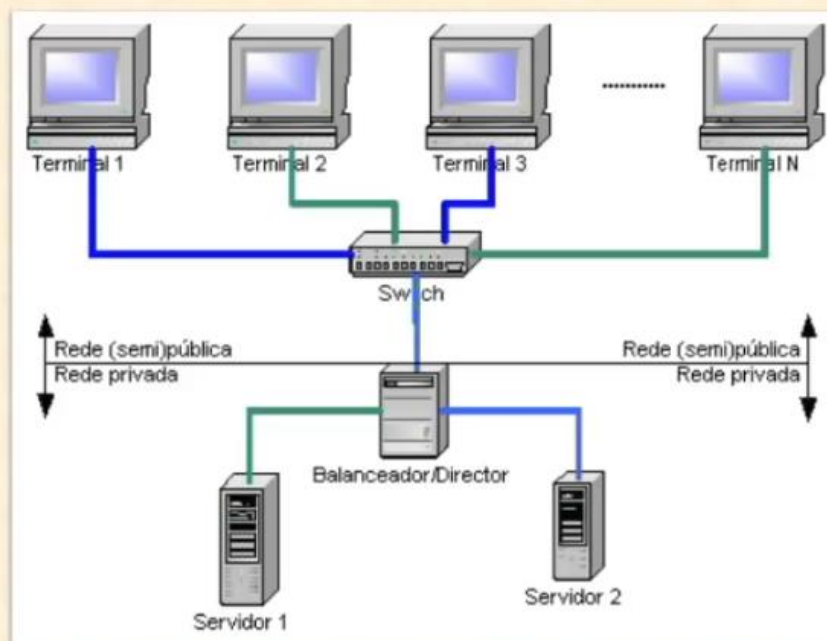
- SAP
- Oracle Apps
- Microsoft Dynamics

Cost

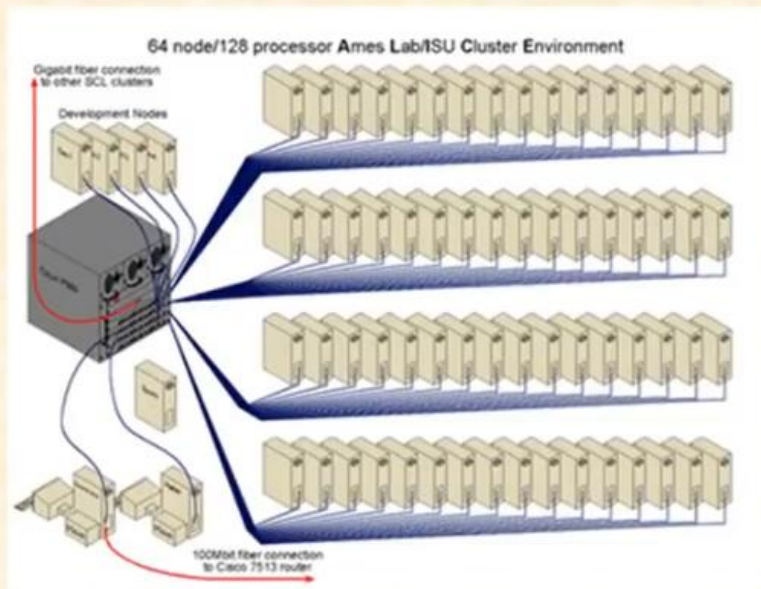


Cluster Computing

Homogenous Servers



Cluster Computing

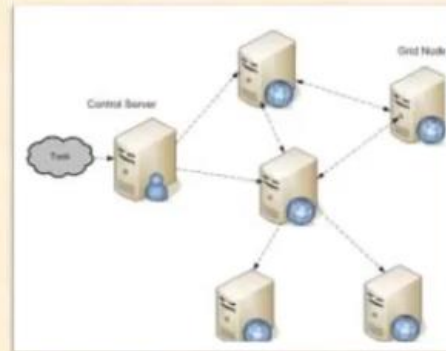
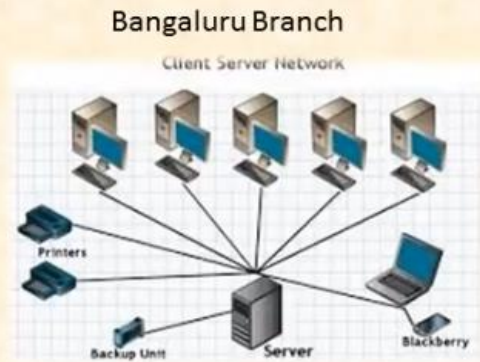


Cluster Computing



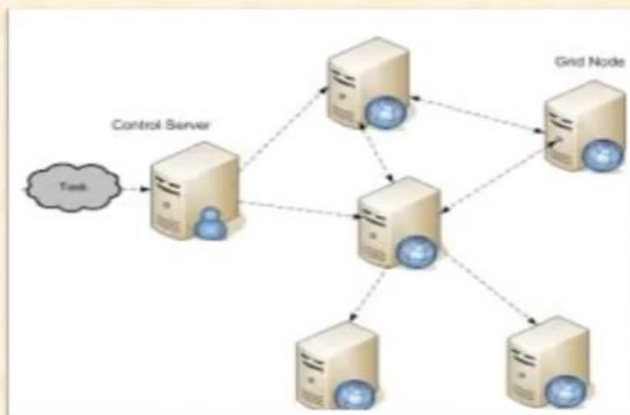
Grid Computing

- Different Locations



A

Grid Computing



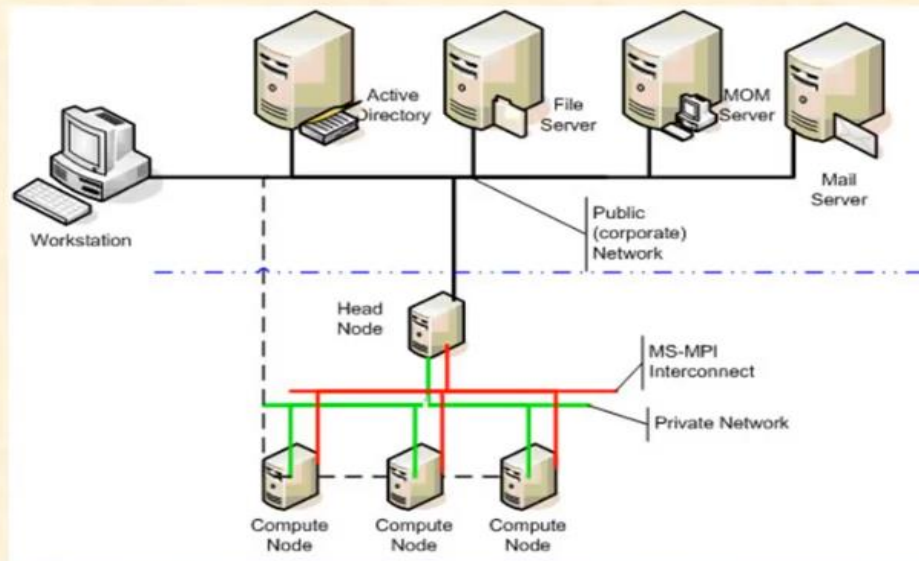
Heterogeneous Servers

- Different Operating Systems
- Different Application Servers

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

Grid Computing

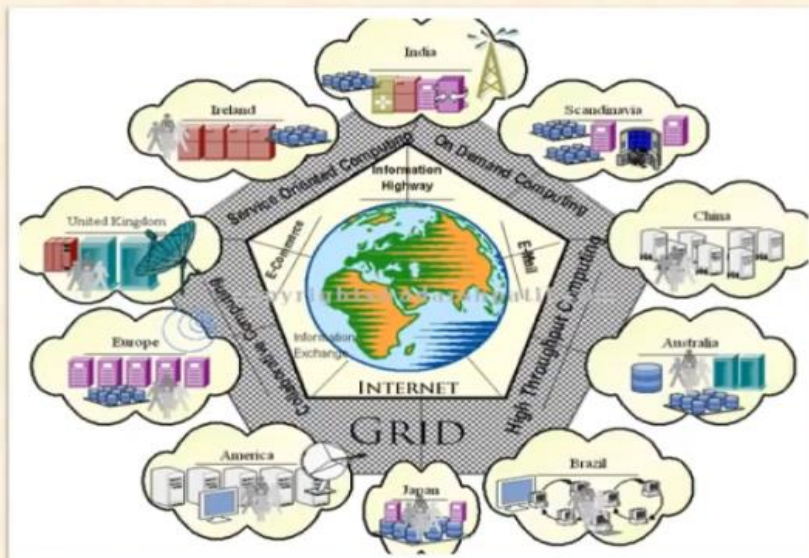
- Different Services



Ac

Cloud Computing

- Combination of Cluster and Grid Computing



A

Cloud Computing

The diagram shows a central globe with 'INTERNET' and 'GRID' written below it. The globe is surrounded by eight cloud-shaped nodes, each connected to the center by a thick grey arrow pointing towards the globe. These nodes represent various sectors: India (with a temple icon), Telecom (with a tower icon), Healthcare (with a person and heart icon), Finance (with a dollar sign icon), Retail (with a shopping cart icon), Energy (with a power plug icon), Manufacturing (with a factory icon), and Transportation (with a truck icon). Each node also contains smaller icons related to its sector.

Companies who Own Cloud

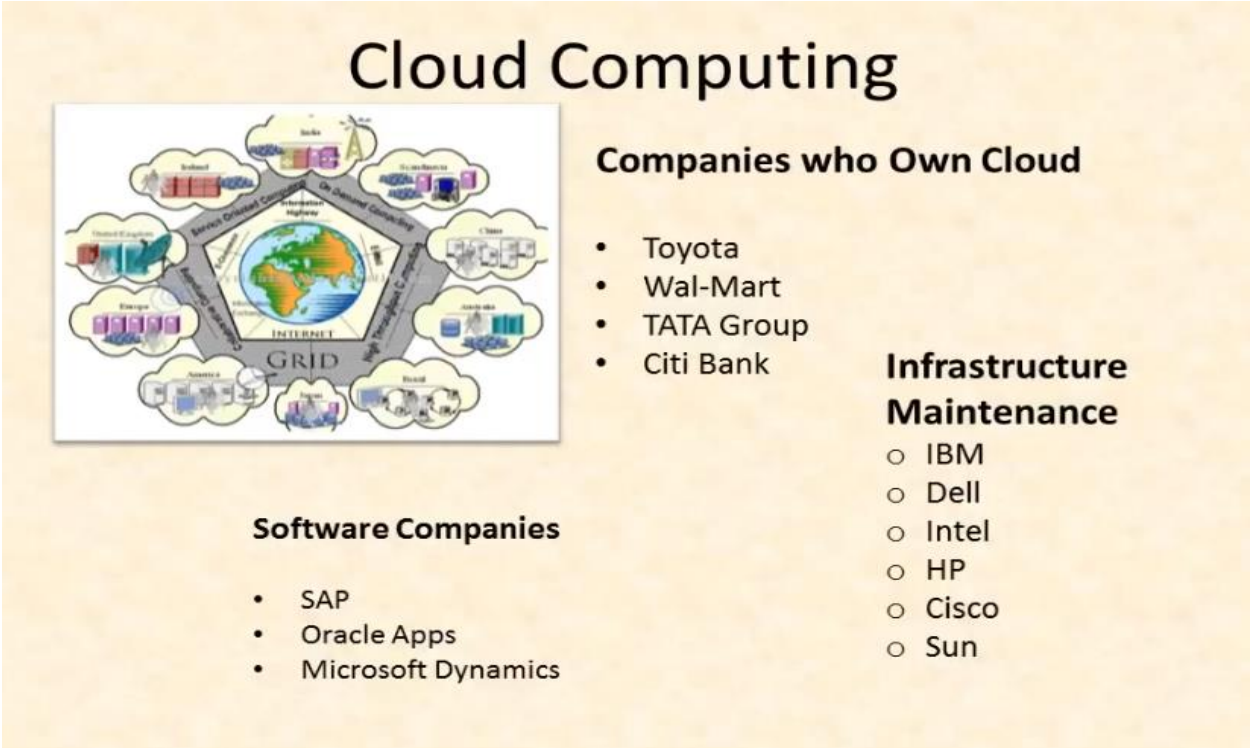
- Toyota
- Wal-Mart
- TATA Group
- Citi Bank

Infrastructure Maintenance

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

Software Companies

- SAP
- Oracle Apps
- Microsoft Dynamics



Cloud Computing

The diagram shows a central globe with 'INTERNET' and 'GRID' written below it. The globe is surrounded by eight cloud-shaped nodes, each connected to the center by a thick grey arrow pointing towards the globe. These nodes represent various sectors: India (with a temple icon), Telecom (with a tower icon), Healthcare (with a person and heart icon), Finance (with a dollar sign icon), Retail (with a shopping cart icon), Energy (with a power plug icon), Manufacturing (with a factory icon), and Transportation (with a truck icon). Each node also contains smaller icons related to its sector.

Companies who Own Cloud

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- Wal-Mart
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Infrastructure Maintenance

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- Intel
- HP
- Cisco
- Sun

Software Companies


- SAP
- Oracle Apps
- Microsoft Dynamics

- [illegible]

[illegible]

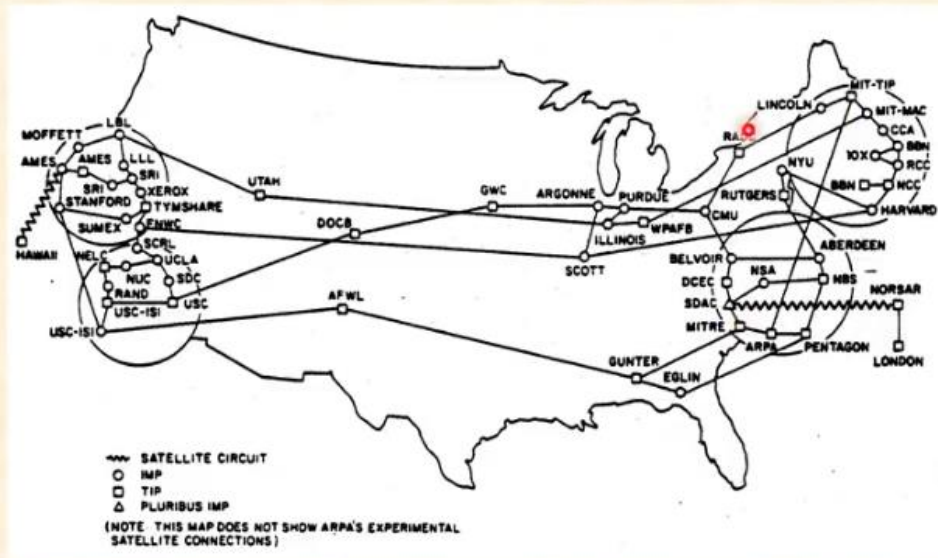
- # Cloud Computing
-
- The diagram shows a central globe with 'INTERNET' and 'GRID' written below it. Ten clouds surround the globe, each connected by an arrow pointing towards the center. The clouds contain various icons: India (person), Telecom (tower), Healthcare (pill), Finance (dollar sign), Retail (shopping cart), Energy (lightning bolt), Manufacturing (factory), Transportation (truck), Government (capitol dome), and Education (graduation cap). The arrows are labeled with terms like 'Service Oriented Computing', 'On Demand Computing', 'Virtualized Computing', 'Distributed Computing', 'Autonomic Computing', 'Adaptive Computing', 'Intelligent Computing', 'Collaborative Computing', 'Social Computing', and 'Mobile 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

[illegible]

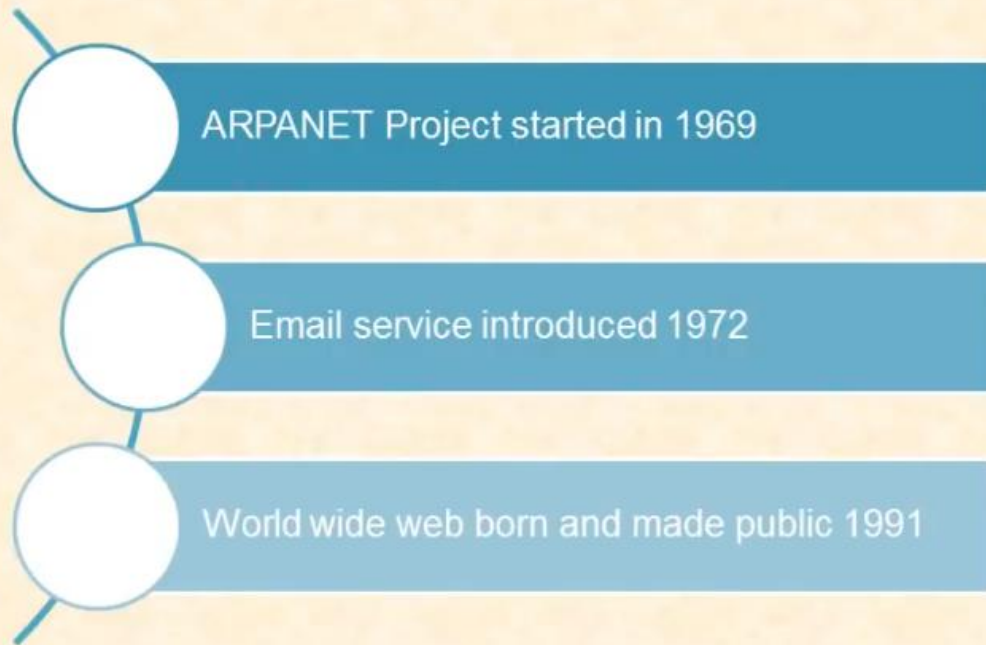
- # Cloud Computing
- 
- Companies who Own Cloud
 - Toyota
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 - TATA Group
 - Citi Bank
 - Infrastructure Maintenance
 - IBM
 - Dell
 - Intel
 - HP
 - Cisco
 - Sun
 - Software Companies
 - SAP
 - Oracle Apps
 - Microsoft Dynamics

Evolution of Cloud Computing

Evolution of Internet ARPANET



History Of Internet



Email vs Web

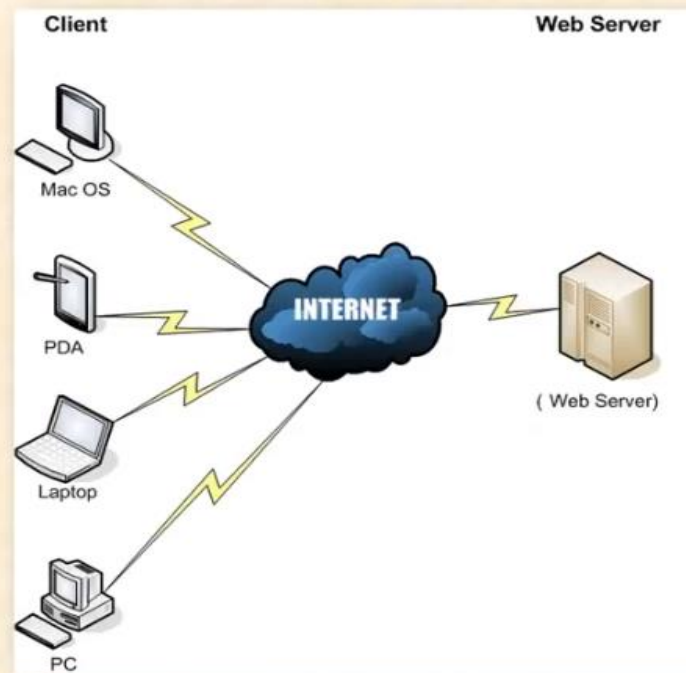


Email
Like one-to-one



Website
Like Notice Board

Server in Internet



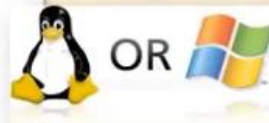
Public Internet



dot-com bubble in 2000



Hosting Service Providers

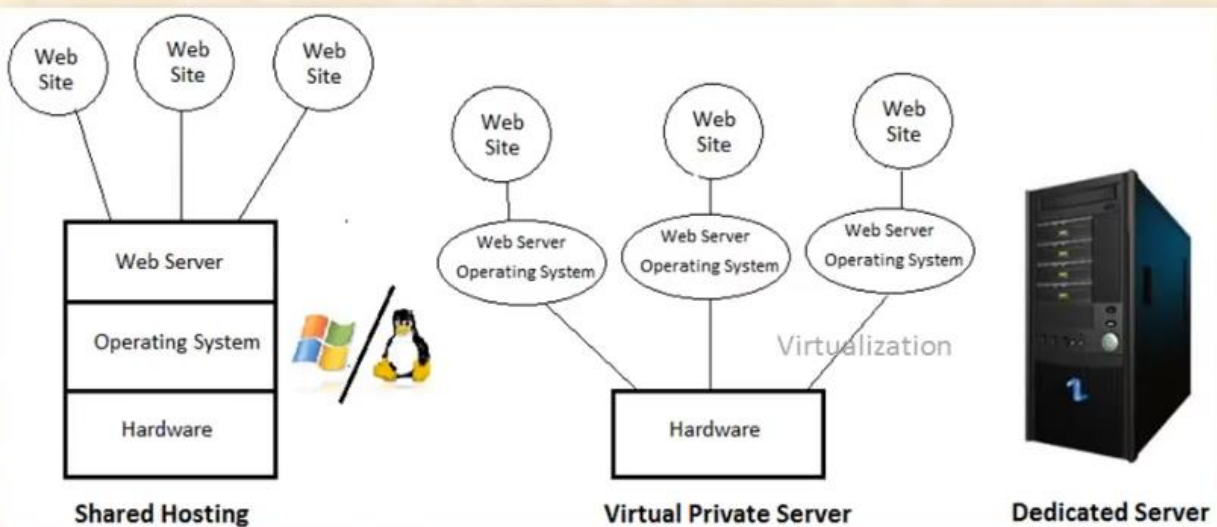


Third Party Server

- 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](#)

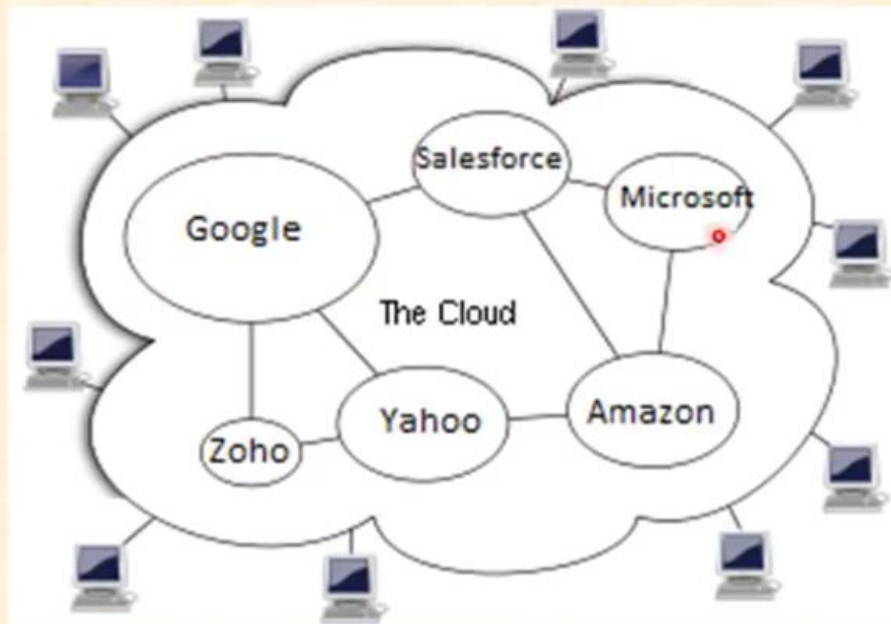
Data Centres

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



Ac

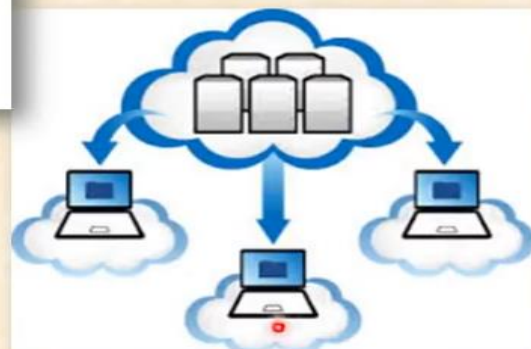
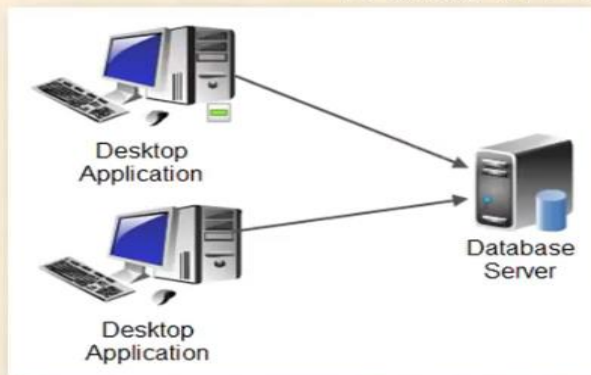
Internet as Cloud



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

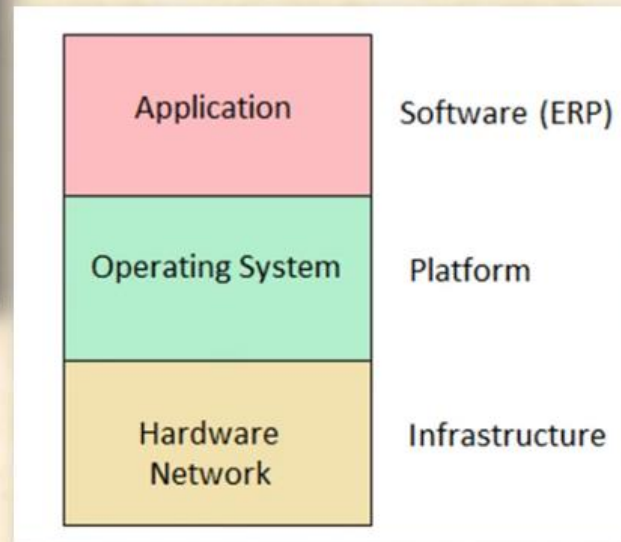
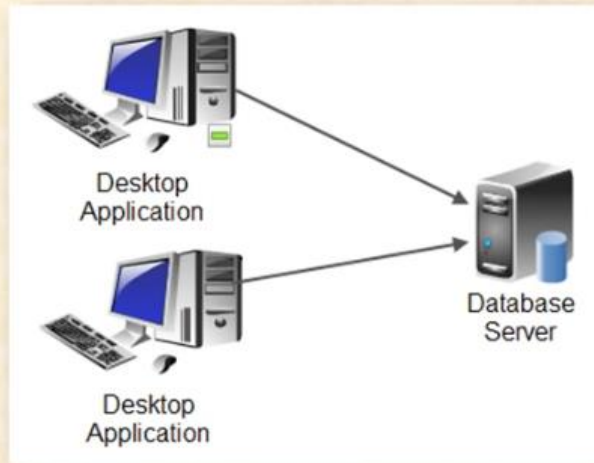


**Rented - Shared Hosting
For
Websites**



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

Server Requirement



Example



Just Space

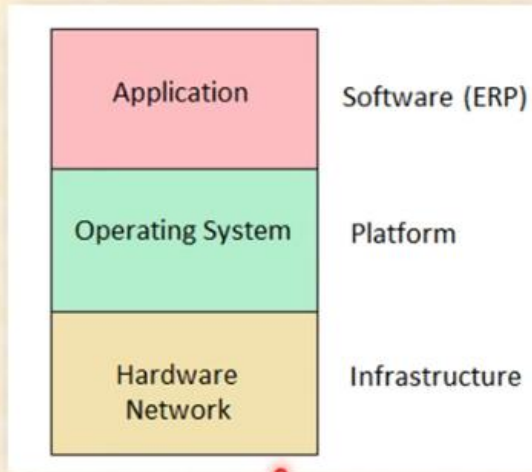


Space & Decoration



Space, Decoration and Catering

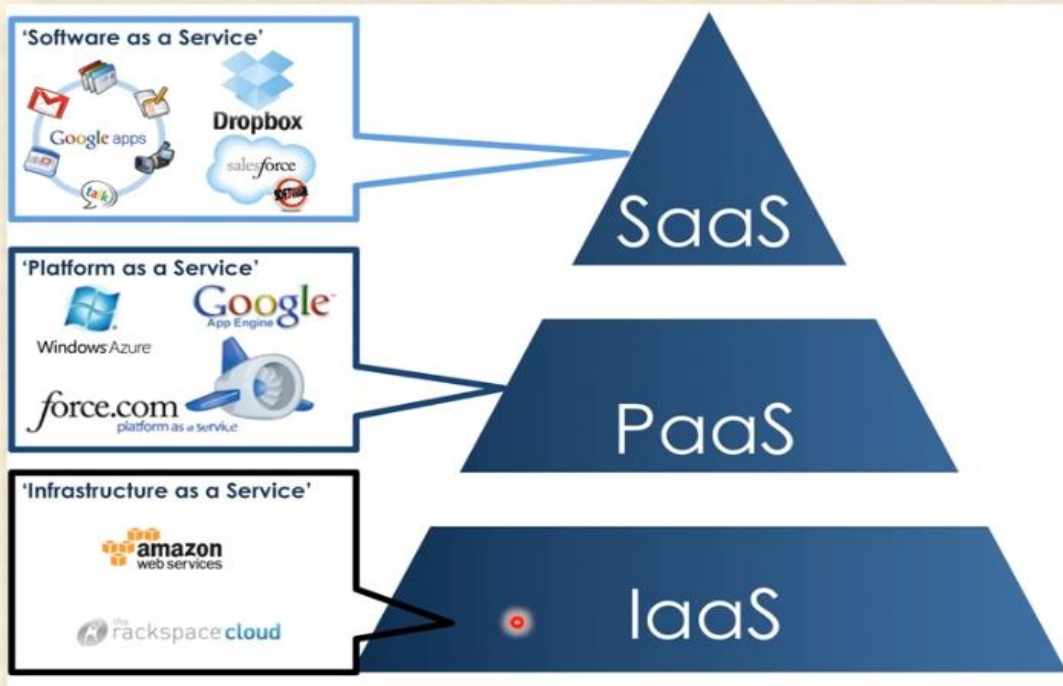
Choices for Cloud Server



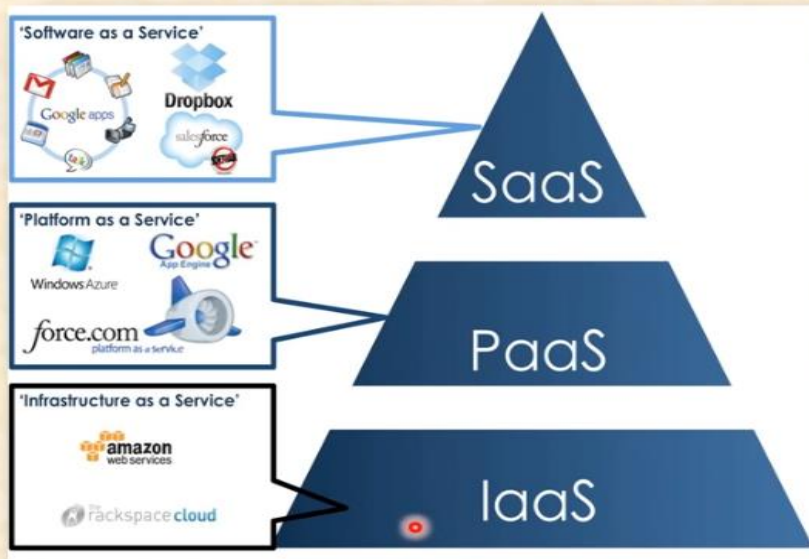
Choices

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

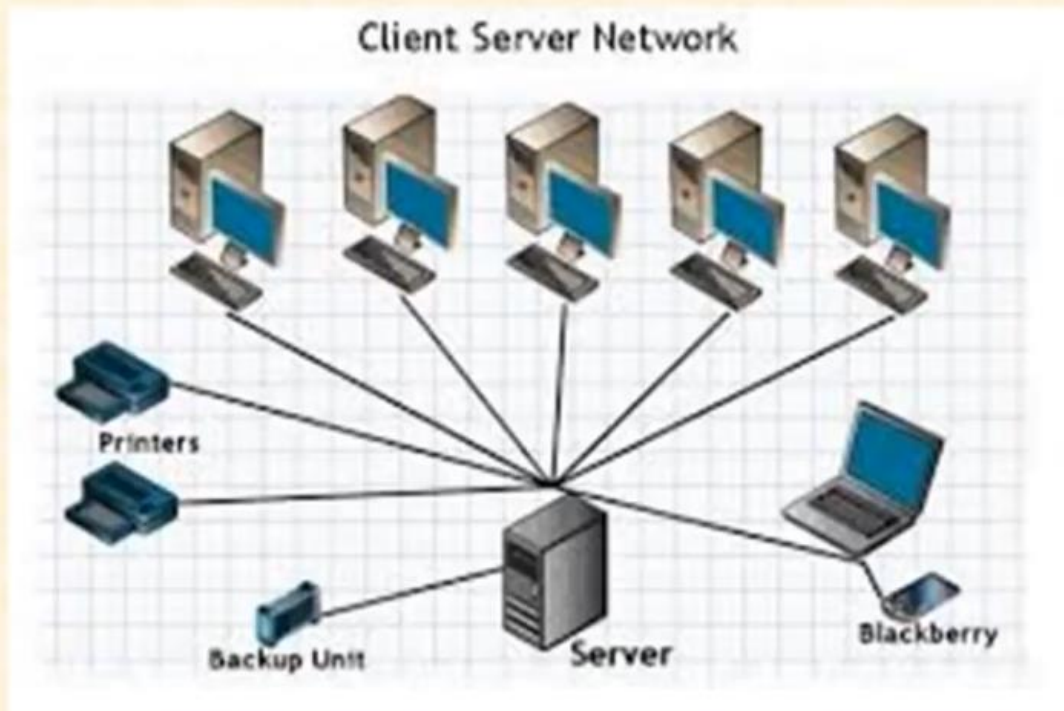
Security

Scalability or Elasticity (on-demand Resources)

Maintenance

Software Delivery

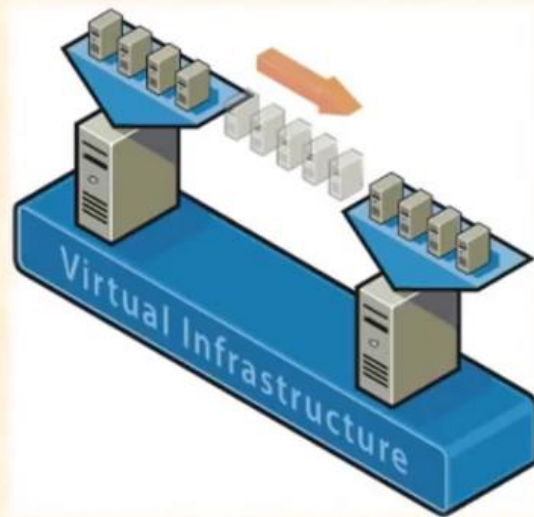
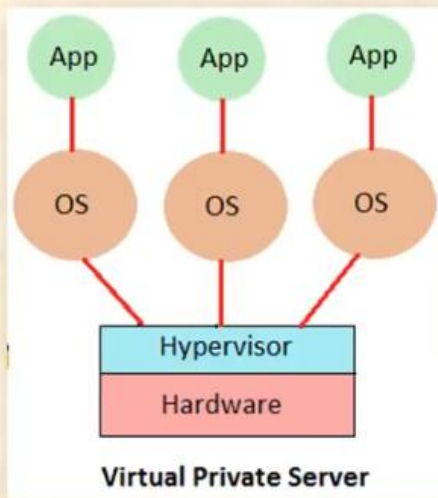
Cost



Access from anywhere



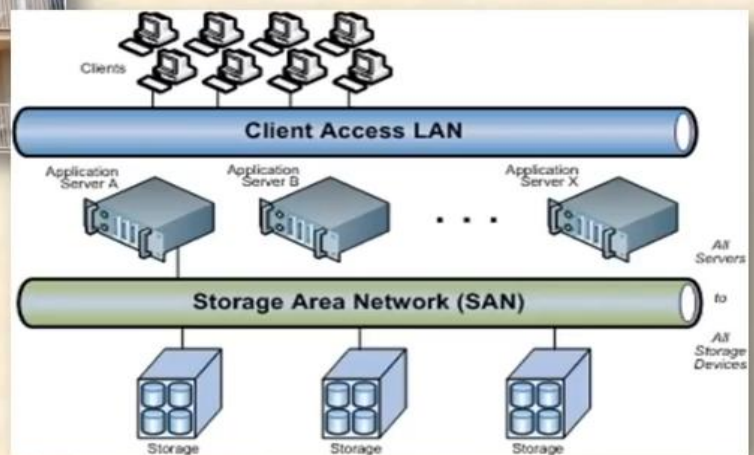
Virtualization & Multi-Tenancy



Hypervisors

- VMware
- Citrix
- Window 2008

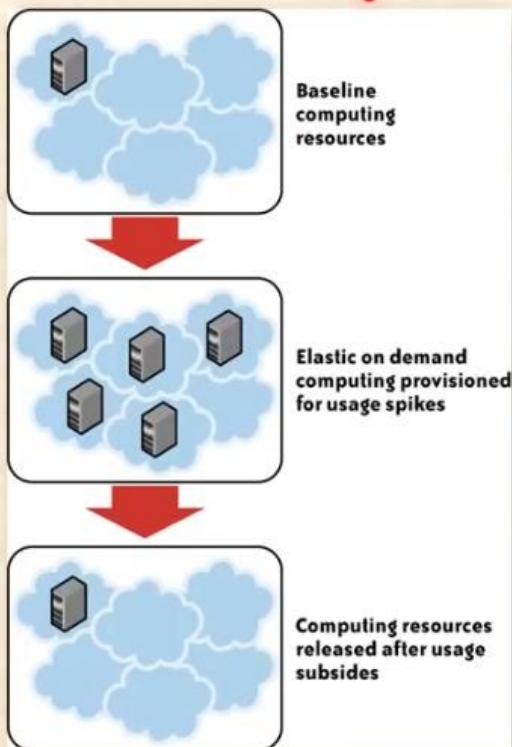
Multi-Tenancy



Reliability and Security



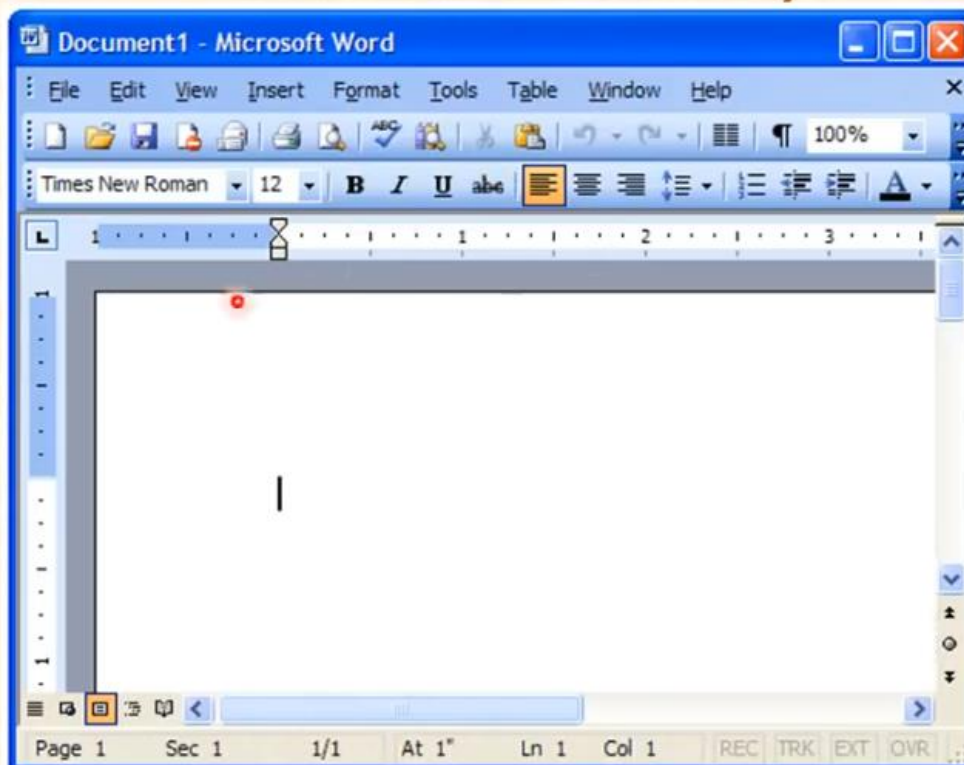
Elasticity & Maintenance



Software Delivery



Software Delivery



Software Delivery

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

