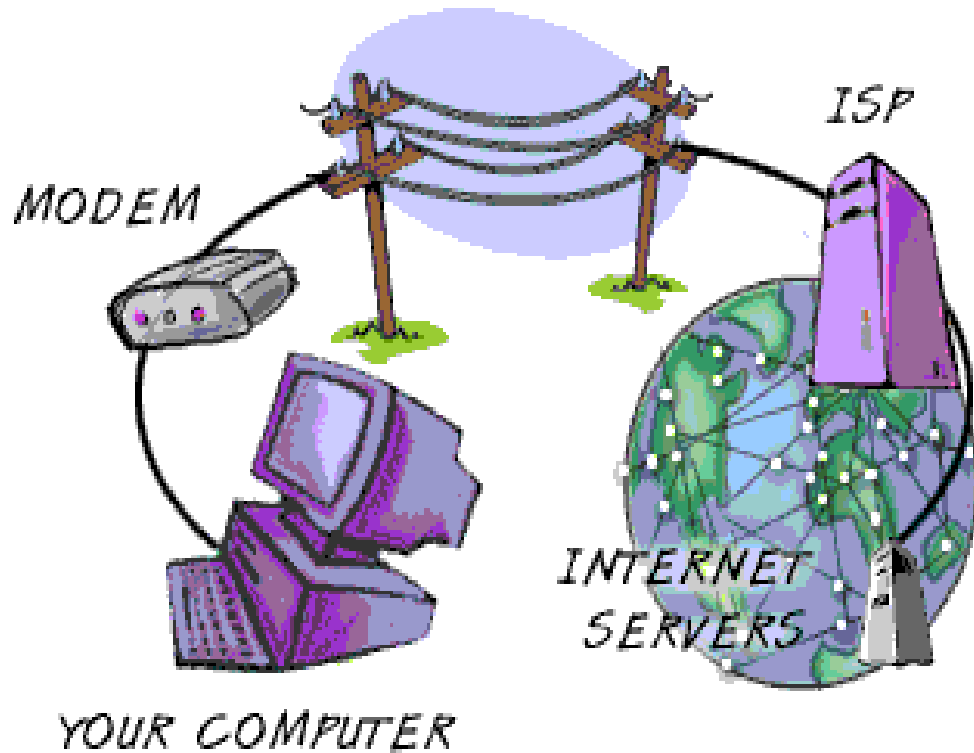


Internet



Internet is the network of networks i.e. a global network which make WWW (world wide web)

Birth of the Net

The Internet grew out of an experiment in the 1960s by the U.S. Department of Defense. The DoD wanted to create a computer network that would continue to function in the event of a disaster, such as a nuclear war. If part of the network was damaged or destroyed, the rest of the system still had to work. That network was **ARPANET**, (Advanced Research Projects Agency Network) which linked U.S. scientific and academic researchers. It was the forerunner of today's Internet.



Birth of the Net

In 1985, the National Science Foundation (NSF), an American research organization, created **NSFNET**, a series of networks for research and education communication. Based on ARPANET protocols, the NSFNET created a national backbone service, provided free to any American research and educational institution. At the same time, regional networks were created to link individual institutions with the national backbone service.

NSFNET grew rapidly as people discovered its potential and as new software applications were created to make access easier. Corporations such as **Sprint** and **MCI** began to build their own networks that they then linked to NSFNET. When commercial firms and other regional network providers took over the operation of the major Internet arteries, NSF withdrew from the backbone business.

NSF also coordinated a service called **InterNIC** that registered all addresses on the Internet so that data could be routed to the right system. This service has now been taken over by Network Solutions, Inc. and other Internet registration services in cooperation with NSF

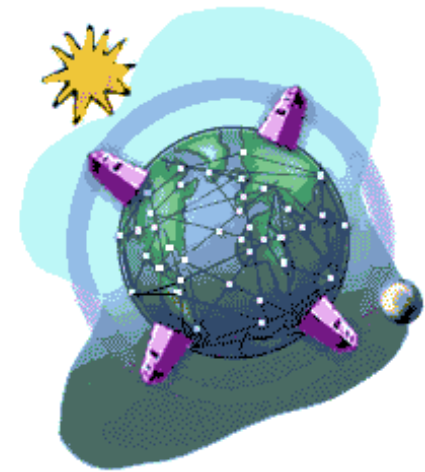
Net Anatomy

The Web physically consists of your personal computer, **web browser** software, a connection to an **Internet service provider**, computers called **servers** that host digital data, and **routers** and **switches** to direct the flow of information.



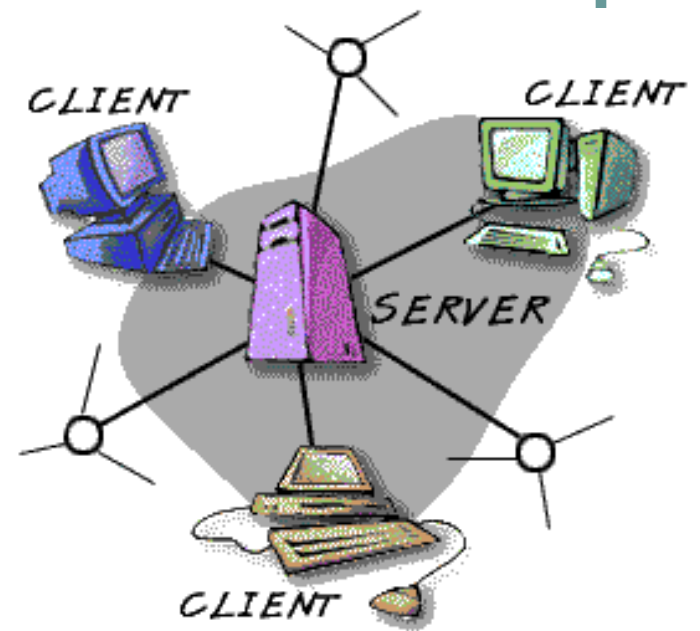
Web Browsers

A web browser is the software program you use to access the **World Wide Web**, the graphical portion of the Internet. The first browser, called NCSA Mosaic, was developed at the National Center for Supercomputing Applications in the early 1990s. The easy-to-use point-and-click interface helped popularize the Web. **Microsoft Internet Explorer** and **Netscape Navigator** are the two most popular ones.



Navigating the Web

The Web is known as a **client-server** system. Your computer is the client; the remote computers that store electronic files are the servers. To visit the website, enter the address or **URL** of the website in your web browser. Browser requests the web page from the web server that hosts the requested site. The server sends the data over the Internet to your computer. Your web browser interprets the data, displaying it on your computer screen.



Navigating the Web

The "glue" that holds the Web together is called **hypertext** and **hyperlinks**. This feature allows electronic files on the Web to be linked so you can jump easily between them. On the Web, you navigate through pages of information--commonly known as **browsing** or **surfing**--based on what interests you at that particular moment.

Web pages are written in a computer language called **Hypertext Markup Language** or **HTML**.

W3C



The World Wide Web was originally developed in 1990 at CERN, the European Laboratory for Particle Physics. The original idea came from a young computer scientist, Tim Berners-Lee. It is now managed by The World Wide Web Consortium. The **WWW Consortium** is funded by a large number of corporate members, including AT&T, Adobe Systems, Inc., Microsoft Corporation and Sun Microsystems, Inc. Its purpose is to promote the growth of the Web by developing technical specifications and reference software that will be freely available to everyone.

Web Addresses

World Wide Web is a network of electronic files stored on millions of computers all around the world. **Hypertext** links these resources together. **Uniform Resource Locators** or **URLs** are the addresses used to locate the files. Every URL is unique and identifies one specific file.

example:

<http://www.du.ac.in>

The home page of Delhi University.

*WORLD WIDE WEB
ADDRESS*

<http://www.whitehouse.gov>

method for
retrieving
page

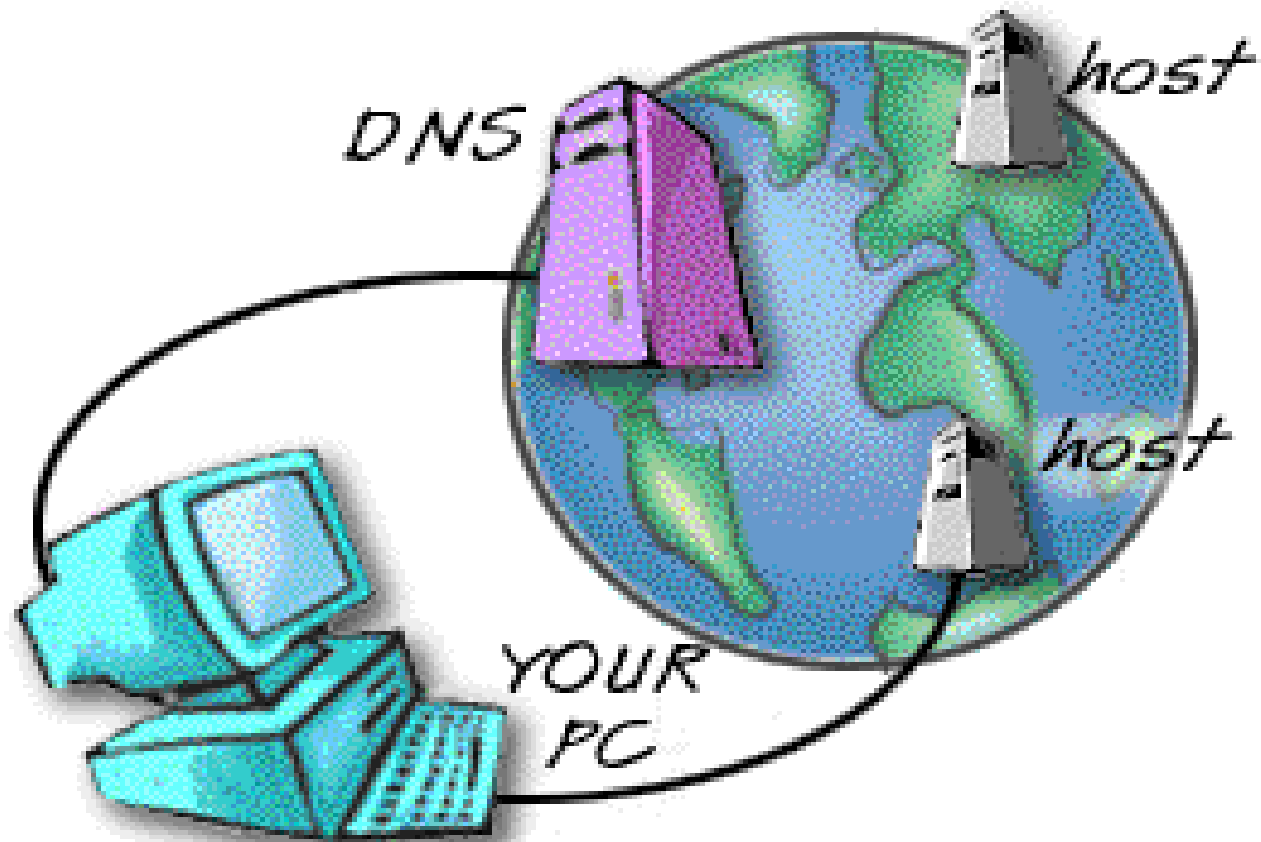
type of
page

Internet domain
of website

Domain Names

Every computer that hosts data on the Internet has a unique numerical address. For example, the numerical address for the White House is 198.137.240.100. But since few people want to remember long strings of numbers, the **Domain Name System** (DNS) was invented. DNS, a critical part of the Internet's technical infrastructure, correlates a numerical address to a word. To access the White House website, you could type its number into the address box of your web browser. But most people prefer to use "www.whitehouse.gov." In this case, the domain name is **whitehouse.gov**.

Domain Names



The Structure of a Domain Name

A domain name has two or more parts separated by dots and consists of some form of an organization's name and a three letter or more suffix. For example, the domain name for IBM is "ibm.com"; the United Nations is "un.org." The domain name suffix is known as a **generic top-level domain** (gTLD). It describes the type of organization.

Currently in use gTLDs:

.aero--For the air-transport industry

.biz--Reserved for businesses

.com--For businesses, commercial enterprises

.edu--For educational institutions and universities

.gov--Reserved for United States government agencies

.info--For all uses

.mil--For the United States military

.net--For networks; usually reserved for organizations such as Internet service providers

.org--For non-commercial organizations

Bookmarks and Favorites

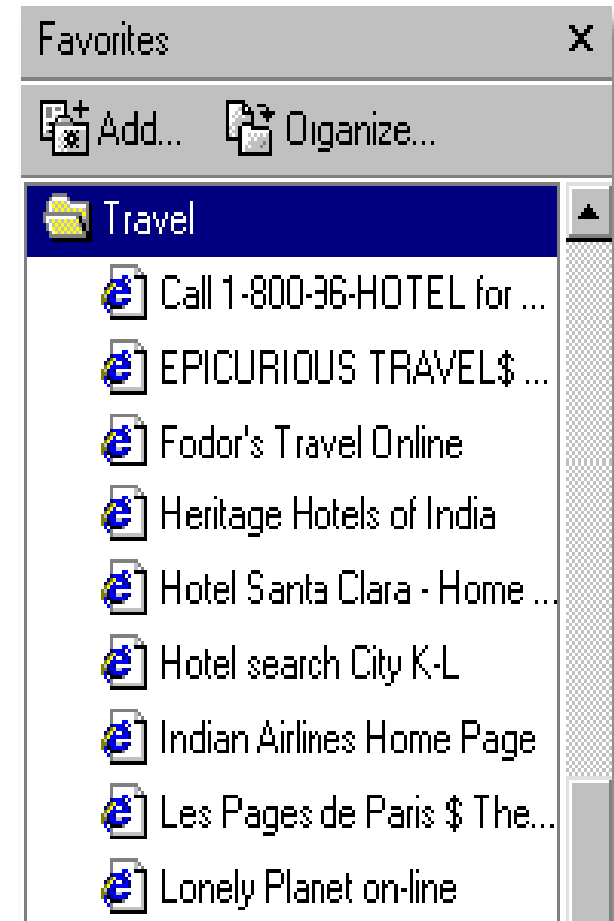
Bookmarks and **Favorites** save Web addresses so you can return to them quickly.

To save a web page, go to the Bookmarks or Favorites menu or click on its icon and select **Add**. When you click on the icon again, the title of the page you recorded will appear at the bottom of the list. To access the page, just double-click on the title.

Bookmarks and Favorites

To organize your Favorites,

Click on the **Favorites** button on the toolbar to open the Favorites window. Now select **Organize Favorites**. Click on the folder icon to create a new folder, then name it. Now click on each Favorite once, hold down your left mouse button and drag the Favorite into the appropriate subject folder.



Search Engines

- To search the Internet you use what are called Internet **search engines**.
- These are easily accessed via your Internet browser (i.e. Microsoft Internet Explorer or Netscape Navigator/Communicator).
- Within the search engine you enter a word or phrase and it will retrieve documents from the Internet based on the information you typed in.

