

CHAPTER 2 INTERNET SERVICES

INTRODUCTION

Internet is not only used for sending and receiving information. It has its commercial aspect too. Internet today offers a number of standardized services to all its users. In fact, it is like a multipurpose tool to communicate with one another, collect information and enhance knowledge about the subject you like, conduct research, play games, invest in shares or just look around in search of recipes or even jokes or the latest technological developments.

CONNECTING YOUR PC TO INTERNET

Before one starts using Internet, the PC should be connected to the Internet server which can be done either through direct link (Leased Line, or ISDN or T-1 or T-3 link or DSL) or through dial-up connection. Dial-up is the most economic and more popular type of connection for a non-professional PC user.

To connect your PC to Internet, you need to follow some steps. In India various types of dial-up accounts are available through various ISPs like VSNL, MTNL, Mantra Online, Satyam, Net4u etc. After buying a dial-up connection, first create a new connection shortcut, which will dial-to your ISP server through your modem, in order to connect to the Internet.

Steps to create a dial-up connection shortcut:

1. Double-click on **My Computer**.
2. In My Computer window, double click the **Dial-up Networking** icon. It will open Dial-up Networking window.
3. In the Dial-Up networking window, double click at **Make New Connection wizard**.
4. When the Make New Connection wizard starts, do the following:
 - (i) **Step 1**, specify a name for your ISP server's computer.
 - (ii) **Step 2**, specify the phone number of your ISP server. This phone number is given to you by your ISP at the time of buying your dial-up account.
 - (iii) **Step 3**, specify the name of your newly created connection and then click at Finish. The moment you do so, a new short-cut appears in the Dial-up Networking window, representing your newly created connection. Whenever you have to connect to Internet, you need to double-click it.

INFORMATION RETRIVAL

After connecting your PC to Internet, you are ready to retrieve information from Net. But for this ,you need an important software called **Browser**. A browser is a program that lets you visit different (web) sites on the net and display their offering on your computer.

To visit a site on the Net, you need to supply the address of the site or in other words, its URL to the browser. And you'll see your browser fetch the 'home page' from the site-address you have specified in the address bar of your browser. This way you can explore all the sites on the web. Exploring web is generally known as **Net Surfing**. Making the copy of requested webpage or file or document on user computer is called downloading.

ELECTRONICS MAIL

Electronics mail is a system for delivering message from one person to another. It has most of the familiar components of regular mail, except maybe the envelop & the stamp. It is one of the service to communicate with other people on the internet, which is widely used & is very popular.

E Mail can be used to establish any type of conversation:-

- To keep in touch with friend & relatives.
- To get or send some information.
- To post your resume.
- To invite people.
- To market any product or service
- To simply express your opinion.

The following table shows the comparison between Email and regular mail.

Component	Regular Mail	E-mail
1. How the message is composed	Paper-Pencil	Windows Email program
2. How mail is transferred to post office	Postal carrier	The network
3.The place where message are stored	Post office	Mail server or Electronic post office
4. How mail is transferred from storage to recipient	Post carrier	The network
5. How message is opened and read email	Thumb or letter opener	Window program

Email work in a client–server environment. A software is required that runs under windows (the client) & an Email post office program running on a host computer (the server). Without any of these or both components working together, email message cannot be received. The client program talks to the server program over the network to transfer mail back & forth.

The Email server is a series of programs running on a Unix host computer that sends & receives mail from other electronics post offices. The client mail server must have a name which must be known to the user since the client program needs to know where to go to get & send messages.

Email Address

Email address has two parts both separated by “@” (“at”) symbol.

- (i) User Name – On the left side of @ separator is the user name which cannot have blank spaces; letters & numbers are separated by a period(.), hyphen(-), or underscore(_) character.
- (ii) Domain Name – The right side of @ separator that identifies the server or host or network that provides service of email, is sometime called email server.

A typical email address is

- (i) Rebecca@hummer.virginia.edu
- (ii) Suburna@hotmail.com

Advantages of E – Mail

E mail has a number of advantages over some other form of communication. It's quick , convenient & non intrusive.

- It makes communication quick with anyone on the Internet. It reaches its destination in a few minutes or seconds. Whatsoever be the distance
- The cost of communicating with some one is not related with the distance. Also the cost does not depend on the size of the message.
- Letter, notes , files, data or report all can also be sent using some technique.
- The recipient is not interrupted by the arrival of email.
- Whenever e-mail arrives, it is not necessary to read it at that tie only or instantly. Since its stored in INBOX which is a folder in your mail account available on Net, it can be read or written at any time whenever required.
- Because all the messenger are files, automatically a record of communication with anyone can be maintained
- It reduces the clutter of paper in modern office.
- It waits until you read it.

In short it can be summarized as:

- Low Cost
- Speed
- Waste reduction
- Ease of use
- Record maintenance

Limitation of E – mail

It is not necessarily private . Since message are passed from one system to another & sometimes through several systems on network, there are many opportunities for some one to intercept or read Email.

- It does not show facial expressions. Can only be send by words, so it doesn't show emotions
- Since it is possible to receive too many e – mails, there may be limit of space taken by your e-mail on the computer system.
- It's possible to forge e – mail.
- Hardware requirement for e-mail.
- Outright deletions & text changes can be done by anyone.

E –MAIL PRIMER

Before you start sending and receiving e – mails you must have an e – mail account. You can have either a web – based online e – mail account or e – mail account on your ISP's server. However, as you must be knowing that an e-mail account on an ISP's server is a paid account and a web – based email account is generally free.

Creating a Web-based E-mail Account

You can create your Web based free email account upon many sites. Some of them are being listed below:

<http://www.hotmail.com>
<http://mail.yahoo.com>

<http://www.rediffmail.com>
<http://mail.indya.com>

VIEWING RECEIVED MAILS

Once you have created your e – mail account , you can log in it and view your mail. For this you'll have to get back to the web page that allows you to log in to your e – mail account. For instance , we have created an Email account on sify.com, so we will have to go to web page yahoo.sify.com. Following steps will guide you how to view the mails in your e- mail account .

- (i) Go to mail.sify.com's web pages
- (ii) Here you'll see a list of messages along with details like Date, From, Subject, Size etc. To view a message, move your cursor either on **From Detail of Message** or on **Subject Details Of Message**. Wherever, you cursor changes to a **hand symbol**, click there to view it.

Replying or Forwarding an email message

While you are reading an email message you've received, you can reply to the sender of this message immediately by clicking at **Reply** button. When you click at **Reply** button, it takes you to compose window, where , automatically the address of sender appears in front of **To** box i.e., the sender becomes recipient of reply message.

If you received a joke or some interesting or useful piece of information, you may want to send the same message to someone else. This can be done by clicking at **Forward** button. After clicking you need to specify the email addresses of the recipients to whom you intend to forward it.

When you log in to your email account, your email server takes you into a folder called **Inbox** . **Inbox** is the name of folder that stores your received mails.

Sending Mail

To send mail(s) to friends or relatives, you need to first log in to your email account and the follow these steps:

- (i) After logging in to your email accounts, you need to click at **Compose (or New Mail** in some accounts) button to compose a new mail message to be sent (Figure 2.8 from Text Book).
- (ii) In the **Compose Message** window, you'll see various fields, which are to be used for the following things:

To : Mail-id of recipient

CC : Mail-ids of recipients of **Carbon Copy** of this mail message

Bcc : Mail-ids of recipients of **Blind Carbon Copy**.

Subject : Title of the mail message

- The **Carbon Copy** i.e. **CC** allows you to send the same mail message to multiple recipients at the same time.
- The **Blind Carbon Copy** i.e. **Bcc** field allows the sender to send same mail-message to multiple recipients without letting , them know that some other persons also have received the same message

Separate multiple email addresses by commas or semicolons.

- (iii) Fill details of email message and write the text in the box designated for it. If you want to **attach a file** with your email message, firstly browse through your computer to select the desired file, and then click at **Attach**.

(iv) Once you are through with composing the email message, click at **Send** button. And your email will be sent to the recipient's Inbox in no time.

EMOTICONS or SMILEYS

In e mail & newsgroup, a sideways face made of ASCII characters that puts a message into context. Emoticons also called smiley, are the symbols used for expressing emotions or conveying facial expressions.

Acronyms- and abbreviations work like online shorthand. They are used to speed up typing and you will find them sprinkled among Internet email, newsgroups and chat channels.

See Table 2.2 from text book

SEARCH ENGINE –A search engine is a program that searches through a database of web pages for particular information.

How to use search engine:-

- Go to the Home page of search engine.
- Type the info to be searched for in the box provided for it by typing some keywords.
- Click on search button next to it.

The result is a list of doc/files that contain one or more of these words in their titles, description or text.

Some Popular search engines :-Table 2.3 From Text Book

Search Engine /Directory	URL
Alta Vista	http://www.altavista.digital.com/
DejaNews	http://www.dejanews.com/
Exite	http://www.exite.com/
HotBot	http://www.hotbot.com/
Infoseek	http://www.infoseek.com/
Lycos	http://www.lycos.com/
NetGuide Live	http://www.netguide.com/
WebCrawler	http://www.webcrawler.com/
Yahoo!	http://www.yahoo.com/
Google	http://www.google.com/

HOW SEARCH ENGINE WORKS

In search engine, you can type keyword(s) to search for and a search engine searches them, on the web and provides you the details. A search engine works with the help of following three elements:

- Spiders or Webcrawler or Bots or Agents** :-The search engines use software called spider or webcrawler or Robot or bot or agent which comb the internet looking for documents and their web addresses.
- Indexing Software and Database** :- The lists of document and web addresses collected by bots are sent to the indexing software. The indexing software extracts

information from the documents and web address, prepares an index of it and stores in a database.

- (iii) **Search Algorithm** :- When you perform a search by entering keywords, the search engine software search its database(in which indexing software stores its entries)using a particular search method called **Algorithm**.

Some Searching Tips (Refer Text Book for examples)

1. Do not ask questions.
2. Surround your query in quotes or put some punctuation marks(; -)
3. Use wildcard * for pattern matching.
4. The lower case word matches are not case-sensitive but uppercase words are case-sensitive.
5. To specify that a word or phrase must appear in matched documents , put a plus sign(+) immediately before it.
6. To specify that a word or phrase must not appear in matched documents , put a minus sign(-) immediately before it.

FINDING PEOPLE ON THE NET

The internet provides several search engines that are primarily intended to help you to locate general information. If you want to find out a person's mail-id, phone numbers, street address, you can use this service. To do this, all you have to do is to go to one such site and then provide some information (like name etc.) to search the desired information. One can do this through the People Search utility of Yahoo !

CHAT

Chatting is the most fantastic thing on Internet. Chatting is like a text-phone. In a telephonic conversation, you say something, people hear it and responds. You hear their responses on the spot and can reply instantly. In the same manner, in chatting, you type a message on your screen, which is immediately received by the recipient ; then the recipient can type a message in response to your message, which is received by you instantly. ONLINE TEXTUAL TALK IS CALLED CHATTING

VIDEO CONFERENCING

Internet includes a program called Real –time conferencing i.e. NetMeeting. While talking over telephone from using internet, both users can see each other, which is called video conferencing.

A two-way videophone conversation among multiple participants is called video conferencing.

Hardware Needed for Video Conferencing

- * A Computer System
- * Internet Connection
- * Video camera installed

Software Needed for Video Conferencing

- * MS NetMeeting (Microsoft NetMeeting)

FTP – FTP refers to the File Transfer Protocol, which defines a method for transferring files from one computer to another over a Network. A computer that stores files for transfer using this protocol is called FTP server or FTP site. It is an Internet standard

for the exchange of files over internet across any platform. FTP is a specific set of rules that comprises of

- Establishing a connection with remote computer.
- Connecting users video directories
- Getting files from & send files to the remote computer.

An FTP server is a computer on the Net that offers files for downloading.

Anonymous FTP is a method whereby FTP server allow the general public to access files. Someone connecting to an FTP site via anonymous FTP does not need an account on that system, a special password or any other specific permission. You simply log in with the **username anonymous** and give your email address in place of a password. You can then download files from the FTP site to your own computer.

Downloading refers to transfer of files from (FTP) server on to your computer.

Uploading refers to transfer of files from your computer onto (FTP) server.

FTP refers to file transfer protocol, which defines a method for transferring files from one computer to another over a network.

FTP File Types and FTP Transfer Modes

File	Mode
Text File	ASCII by definition
Spreadsheet	Probably binary
Database file	Probably binary, possibly ASCII
Word Processor file	Probably binary, possibly ASCII
Program source code	ASCII
Electronic mail message	ASCII
PKzip'ed file	Binary
Backup file	Binary
Compressed file	Binary
Executable file	Binary
www(HTML) document	ASCII
Picture files (eg. GIF, JPEG, MPEG)	Binary
Auto file	Binary

Downloading files

After setting the transfer mode , you are all set to download a file using **get** command.

You can even download multiple files using **mget** command.

These commands are written in the following syntax format:

```
ftp > get <filename>
ftp > get reid.txt
ftp > mget <file 1> <file 2> <file 3> etc.
ftp > mget reid.txt, viole.txt, about.htm
```

Uploading Files

To upload files on an ftp site, you must have proper permission i.e. you must be an authorized user to do so. After logging in as an authorized user you can upload one file using **put** command. Or you can upload multiple files using **mput** command. The syntax of these commands is given below:

ftp > put <filename>
ftp > put reid.txt
ftp > mput <file 1> <file 2> <file 3> etc.
ftp > mput reid.txt, viole.txt, about.htm

if an ftp site has/incoming directory, then you can upload files even as an anonymous user.

Disconnecting from ftp server

Once your file transfers are complete, you can disconnect from the ftp server (but retain the FTP prompt) by using close **command**

ftp > close

or disconnect and also quit the FTP application use command **bye**:

ftp > bye

once you are back on your own computer, the download file should be there.

TELNET

It is an Internet utility that lets user to log onto remote computer systems. It enables Internet users to log on to another computer linked to the Internet including those that cannot directly communicate with Internet's TCP/IP protocol. Telnet establishes a "**plain vanilla**" computer terminal called a network visual terminal. This capability is frequently used to enable communication with BBS(Bulletin Board System) & Mainframe computer.

NEWSGROUP is online community bulletin board, where users can post a message, reply to a message or just read messages. When a user sends a message, the news server posts it for everyone to read. Other members of the news group can now respond to your message.

A Newsgroup or Forum is online community bulletin board, where users can post messages, respond to posted messages, or just read them. Groups of related messages are known as **THREAD**.

This online worldwide conversation is also called Usenet.

BLOGS:-

A blog refers to an online journal where entries are posted. The word blog has been derived from weBLOG.

E-LEARNING (ELECTRONIC LEARNING):-

e-Learning refers to the learning that takes place in an electronically simulated environment.

E-BANKING (ELECTRONIC BANKING):-

Availing the banking services through electronic measures via Internet is called **e-banking**.

E-SHOPPING (ONLINE SHOPPING):-

The process of shopping done over the Internet is called **online shopping** or **e-shopping**. Both products and services can be purchased through online shopping.

E-RESERVATION (ONLINE RESERVATION):-

Making reservation of tickets or hotel rooms or tourist packages etc through Internet is known as **e-Reservation**.

E-GROUPS:-

An **e-group** refers to an online community where people discuss on topics of common interests. A message posted in such a discussion is known as a post. All the posts are listed together on a discussion board, which is viewable to all the members of the group.

SOCIAL NETWORKING:-

Social networking is the grouping of individuals into specific groups via online means through social sites.

NOTE: Read the Text Book Also
