

Expt. No. 1 Date: 13-08-18

Title: Run Different Commands of MS DOS

MS-DOS BASICS

This tutorial gives you an opportunity to try basic MS-DOS commands. By following procedure in this section, you will learn to:

- View the contents of directory
- Change from one directory to another
- Create and delete directories
- Change from one drive to another
- Copy files
- Rename files
- Delete files
- Format a floppy disk

The Command Prompt:

When you first turn on computer, you will see some cryptic information flash by. MS-DOS displays this information to let you know how it is configuring your computer. You can ignore it if you now. When information stops scrolling past, you'll see the following:

C:\>

This is called command prompt or DOS prompt. This underscore next to the command prompt is called cursor. The cursor shows where the command you type will appear.

Typing a Command

This section explains how to type a

Command at the command prompt & demonstrate the "Bad command or file name" message

- To type a command at command prompt

1. Type the following at the command prompt
(You can type the command in either uppercase or lowercase letters)

nul

If you make typing mistake, press the BACKSPACE key to erase mistake & then try again

2. Press ENTER

You must ENTER after every command you type

The following message appears :
Bad command or file name

The "Bad command or file name" message appear when you type something the MS-DOS does not recognise Because nul is not valid MS-DOS commands , MS-DOS will displays "Bad command or file name" message

Now, type the following command at command prompt :

Ver

The following message appears on your screen :

MS-DOS version 6.22

Viewing the contents of Directory

In this section, you will view the content of directory by using dir command The dir

Command stands for **DIRECTORY**:

It only lists all files and sub-directories and no

- To view the content of directory, primarily

Type the following at command prompt ↴

dir

A list similar to following appears

Volume in drive C in MS-DOS 6.22

Volume Serial Number is 16A9-15E2

Directory of C:\

Windows <DIR> 09-08-92 10:27p

Temp <DIR> 05-05-92 12:09p

Config.SYS 09-08-92 10:50p

COMMAND.COM 53014 09-18-92 06:00a

WIN32.DLL 9399 210-11-91 05:00a

DOS <DIR> 09-02-92 4:23p

AUTOEXEC.BAT 290 09-23-92 10:54a

7 files) 62931 bytes available

8732672 bytes free

This is called 'directory list'. A directory list of all files & sub-directories that directory contain. In this case, you see all files and directories in main or root directory of your drive. All these files & directories on your drive are stored in root of directory.

Changing Directories

Look at the list on your screen. All names that have <DIR> beside them are directories. You can see list of files in another directory by changing to that directory & then using dir command again. In this case, you will change the DOS directory.

Before you begin this section, make sure you have directory name DOS by carrying out following procedure.

- To make sure you have directory name windows

1. If you do not see line in directory list indicating that you have directory name window type the following at command prompt

You will see message that includes a line such as following:

Directory of C:\DIRNAME>

- To change from root directory to WINDOWS directory
To change directories, you will use cd command
The cd command stands for "change directory"

1. Type the following at command prompt:
cd windows

The command prompt changes. It should now look like following

C:\windows>

Next, you will use the dir command to view a list of files in DOS directory.

- To Type the following view a list of files in WINDOWS directory

1. Type the following at the command prompt

dir

A list of files in WINDOWS directory

appears, but scroll by too quickly to read

you can modify the dir command so that it displays only one screen of information but at a time

- To view contents of directory one screen at time

1. Type the following command prompt:

dir /p

Once screen of information appears. At bottom of screen, you will see the following message
Press any key to continue . . .

2. To view next screen of information, press any key on your keyboard. Repeat this step until command prompt appears to bottom of your screen.

When you type dir command this time, you included /p switch after the command. A switch modifies the way MS-DOS carries out command. Generally, a switch consists of forward slash (/) that is followed by one or more letters or numbers. When you use /p switch with directory, you specified the MS-DOS should pause after it displays each screen of directory listing information.

The P actually stands for "page".

Another helpful switch can use with dir command is /w switch. The /w switch indicates MS-DOS should show a wide version of directory list.

- To view content of directory in wide format

1. Type the following command prompt:

dir /w

mit In The directory page list appears, with filename listed in wide format. Note that only filename are listed. No information about file's size or data or time of creation appears.

2. If directory contains more file than will fit on one screen you can combine the /p & /w switches as follows

dir /p /w

Changing Back to Root Directory

Next, you will change from DOS directory to root directory. The root directory is directory you were in before you changed to DOS directory. Before you begin this section, make sure your command prompt looks like the following:

c:\DOS> finds /n > display.bas

- To change to root directory.

1. Type following at command prompt:

cd\

Note that slash you type in command is backward slash (\), not forward slash (/).

No matter which directory you are in, this command always return you to root directory of drive. The root directory does not have a name. It is simply referred to backslash (\).

The command prompt shows the following & it will look like

c:\d>

When your command prompt appears similarly this ... that is, when it does not contain the name of directory ... you are in root directory

Creating a Directory

In this section you will create two directories. Creating directory is helpful if you want to organize related files into groups to make them easy to find. Before you begin this section make sure the command prompt look like following

C:\>

To create directory, you will use the md command. The command md stands for "Make directory".

To create & change the directory named FRUIT

1. Type the following command at prompt :

md fruit

You have now created a directory name FRUIT. You want see the new FRUIT directory until you carry out the dir command in next step

2. To confirm that you successfully created the FRUIT directory, type the following at command prompt

dir

or

dir/p

Look through directory list. A new entry somewhere in list should look similar to following

FRUIT <DIR> 09-25-93 12:09p

- To change the directory to new FRUIT directory type the following command prompt
`cd fruit`
 The command prompt should now look like the following
`C:\FRUIT>`
- You will now create a directory within FRUIT directory, name GRAPES.
- To create work with directory name GRAPES

1. Type the following at command prompt

`md grapes`

You will not see the grapes directory until you carry out dir command in next step

Type banner problem get grapes & open it.

2. To confirm that you, successfully created,

grapes directory, type the following at command prompt

`dir`

A list similar to following appears :

Volume in drive C is MS-DOS-6

Volume serial Number is FE49-15E2

Directory of C:\FRUIT

<code><DIR></code>	09-25-93	12:08 p
<code><DIR></code>	09-25-93	12:08 p
<code><DIR></code>	09-25-93	12:08 p

GRAPES

3 files(s) 0 bytes

11534336 bytes free

Note that there are three directories (entry) in FRUIT directory. One is grapes.

directory that you just created. There are two other entries ---- one look like a single period (.) & the other look like other double period (..). These directories interies are important MS-DOS , but you can ignore them They appear in directory and contain information realated to directory structure.

The GRAPES directory is subsidiary of FRUIT directory. A subsidiary is directory within other directory . Subsidiary are useful if you want to further subdivde information.

To cange GRAPES directory, type following at command prompt :

cd grapes

The command prompt should now look like following

C:\FRUIT\GRAPES

To switch back to FRUIT directory type following

cd ..

The command prompt should now look like the following

C:\FRUIT>

When cd command is followed by two periods (..), ms-DOS move up one level in directory structure. In this case, you moved up one level from the GRAPES directory to FRUIT directory.

Deleting a Directory.

If you no longer use particular directory you may want to delet it to simplify your directory structure. Deleting a directory

is also useful if you type wrong name
when you are creating & you want to
delete the incorrect directory name before
creating a new one.

In this section, you will delete
GRAPES directory. Before you begin, this section
make sure the command prompt looks like
following:

C:\FRUIT>

To delete a directory, use the rd command.
The rd command stands for "remove directory".

• To Delete GRAPES directory

1. Type following at command prompt
rd grapes
2. To confirm that you successfully deleted the
GRAPES directory, type following at command
prompt:
dir

The GRAPES directory should no longer
appear in directory list.

Note: you cannot delete a directory if
you are in it. Before you can delete a
directory, you must make directory that
is one level higher the current directory.
To do this, type cd.. at command prompt

Changing Directory

This section describe how to change
drives changing drive is useful if you want
to work with files that are on different
drive.

So far you have been working with
drive C you have other drive you can use.

To store information. For example, drive A is your first floppy disk drive. The files and direction on drive A are located on floppy disk in drive A (you might also have drive B, which contains file & direction stored on the floppy disk in that drive).

Before you begin this section, make sure your command prompt looks like the following:

C:\FRUIT>

To change to & view files on different drive

Insert 3.5" floppy disk in drive A (label side up). Make sure the disk clicks into drive.

Type the following at command prompt:

a:>

Note that command prompt changed to following

A:>

This message may appear after login at *

Not ready reading drive A

Abort, Retry, Fail?

If you see this message, the disk may be not inserted properly. Place the disk label side up in disk drive & make sure the disk clicks into drive. Then type r for Retry. If this message appear again, press F for Fail and the type b: at command prompt. If you no longer see this message type b: instead of a: throughout rest of tutorial.

There must be floppy drive that you want to change to.

3. Change back to drive C by typing following at command prompt :

C:

Your command prompt should return to following

C:\FRUIT>

When you type drive letter followed by colon, you change to drive. The drive letter that appears in command prompt shows which drive is current drive, unless you specify otherwise, any command you type is carried out on current drive and in current directory.

So far, all commands you typed were carried out went drive & in the current directory. You can also carry out a command on a drive that isn't current for example you can view file on disk in drive A without switching to drive A by following this procedure.

- To view the content of windows directory on drive C.

1. Type following at command prompt :

dir c:\windows

A list of all files in DOS directory on drive C should scroll past on your screen.

Coping file

This section describe how to copy single file & a group of files coping file create duplicate of original file & does not remove original file. This is useful for many reasons.

for example, if you want to work on document at home, this is useful for many reasons.

example, if you want to work on document at home you can open it from your computer at work to floppy disk and then take floppy disk home

To copy a file, you will use command when you use the command, you must include two parameters. The first is location and name of file you want to copy. or source. The second is location to which you want to copy file, or the destination. you separate source and destination with space. The copy command follows this pattern:

Copy source destination

Copying a single file

In this section, you will copy notepad.exe file from windows directory to FRUIT directory. You will specify source and destination of these files in two different ways. The difference between the two methods is explained at end section.

Before you begin this section, make sure command prompt looks like following:

c:\FRUIT>

To copy the NOTEPAD.EXE file from windows directory looks like following fruit directory.

1. Return to root directory by typing following at command prompt:

cd\

The command prompt should now look like following

c:\>

Change the DOS directory by typing following at command prompt:

cd windows

The command prompt should now look like following
c:\windows>

2. Make sure the file you are going to copy, NOTEPAD.EXE, is located in WINDOWS directory by using dir command followed by file name

dir notePad.exe

A similar list to following appears

3. To copy NOTEPAD.EXE file name from WINDOWS directory to FRUIT directory, type the following command prompt

Copy c:\windows\NotePad.exe c:\fruit

The following message will appear

1 file(s) copied

4. To confirm that you copied file successfully view the content of FRUIT directory by typing the following at command prompt.

dir \fruit

You should see file listed in FRUIT directory

Renaming Files

This section explain how to rename file you may want to rename a file if the information in it changes or if you decide you prefer another name.

To rename file, you use ren command. The ren command stands for rename. When you see/ use this command you must include two parameters.

The first is file name you want to rename and second is new name for file

You separate two names with space the ren command follows this pattern :
ren oldname newname

Renaming file

In this section, you will rename README.TXT file.

Before you begin this section, make sure your command prompt looks like following

C:\FRUIT>

- 1 To rename NOTEPAD.EXE file to PADNOTE.TXT, type the following at command prompt:

ren notepad.exe padnote.txt

- 2 To confirm that you rename file successfully, type following at command prompt:

dir

Deleting file

This section explains how to delete, or remove, a file that is no longer want on your disk. If you don't have very much disk space, deleting file you no longer use is essential.

To delete file, you will use the del command. The del command stands for "delete".

Deleting a file

In this section, you will delete two files using del command.

Before you begin, make sure your command prompt looks like following.

C:\FRUIT>

- To delete PREFACOM & PERA.HLP file

1. Delete the PADNOTE.TXT file by typing following command prompt :
del PADNOTE.TXT

2. To confirm that you deleted the file successfully, type following command prompt :
dir

- Deleting a group file
In this section, you will use wildcards to delete group of file

Before you begin make sure your command prompt looks like following :

c : FRUST >

To delete file in current directory that end with extension OLD by using wildcards

1. View all file that end with extension OLD by typing the following the command prompt

A list of all file that end with extension OLD appears. Make sure that these are file you want to delete. When you deleting file by using wildcards, this step is very important. It will prevent you from deleting file accidentally.

2. Delete all file ending with OLD by typing following command prompt :

del *.old

3. To confirm that all file with extension old have been deleted, type following at the command prompt

dir

The FRUIT directory should contain no files

Now that FRUIT directory is empty, you can delete it by using rd (remove directory) command that you learned to use in "Deleting Directory" earlier in this chapter.

- To delete fruit Directory

1. Return the root directory try typing following command prompt :

cd \

2. You can see the FRUIT directory in directory list by typing the following at command prompt :
dir or dir /p

3. Remove the FRUIT directory by typing following command prompt

~~rd fruit~~

4. To verify that FRUIT directory has been removed, type the following at command prompt :
dir or dir /p

The FRUIT directory should not appear in directory list.

Expt. No. 2

Date: 19-08-18

Title Practical on Email

Email :

Email is an electronic mail, a system for delivering message from one person to another person. E-mail has most of facilities component of regular mail, in other words to send mail you need to have abilities to compose mail facilities and read it.

Creating Mail Message :

It has three major components

- 1) The mail address
- 2) Subject line
- 3) Body of Message

Header file function

To : The main recipient of message

Cc : Other people you wish to receive.

Subject Description of the message instant to create a new message

- 1) Launch Internet Explorers
- 2) Click the e-mail button to start internet mail
- 3) Click new message to compose new message
- 4) In the field, enter the address of message recipient

e.g.: President @ white house government.

- 5) In the Subject Field enter the Subject message

enter support for internet

- 6) In the body of message enter whatever else happens save internet.
- 7) Choose your file - send message.

Receiving or Reading E-mails :

Once you have made an account connection to the internet and download an unread mail internet mail store all of incoming message in inbox / index unread mail appeared in the bold face with an account that looks like an unread / unopen mail message that you have read icon while open envelop

Reply :

When you click on reply icon the internet mail understanding this & automatic copies the original message in the body & reply to this group of four.

Expt. No. 3

Date: 20-08-18 M02 A0A ②

Title Study of Search Engine M02 A0A

SEARCH ENGINE :- Internet based system

A search engine is a website which is used to search information available on World Wide Web. When we use internet to get the answer of some question we need to search information related to topic

YEAR	NAME
1993	Aliweb , web, Craueyer
1995	Altairsta
1998	Google
2003	Info.com
2005	MSN Search . Ask.com
2006	Guruji . com
2007	Boogmi

SOME OF SEARCH ENGINE :-

① Google Search :-

Google Search is a web search engine own by google and it is the most important search engine on web. Google receive several hundred millions otherwise each day through its various google search was generally developing page and surgery begin in 1997.

② Yahoo Search :-

Owned by Yahoo.com and current target search engine on the web offer its component google is popular internet content

provider. (will be using individual)

③ Ask. com :

Ask. com is a search engine storage in 1996 by garrett greenner navid written in Perl by kali fernied.

Expt. No. 4 Date: 20-08-18

Title Study of Internet connection & component

INTERNET ACCESS :-

Internet access is ability of individual and organisation to connect to internet using computer terminals, computers, mobile devices; and to access services such as e-mail & the World Wide Web. Various Technologies, at a wide range of speeds have been used by Internet Service Provider (ISP) to provide this services.

Internet access was once rare, but has grown rapidly. In 1995, only 40% of world's population had access, with over half of those living in United States. Consumer usage was through dial-up. By first decade of 21st Century, many consumers in developed nation used faster broadband technology and by 2014, 41% of world's population had access, broadband was almost ubiquitous worldwide, & global average connection speeds exceeded 4Mbit/s.

Type of Internet Connection :-

There are various type of connectivity to get hooked to internet. They all can be broadly classified in following category:

- 1> Gateway Access
- 2> Dial up access
- 3> Leased Connection
- 4> DSL Connection
- 5> Cable Modem Connection
- 6> VSAT

1) GATEWAY ACCESS :-

Gateway access is also known as level one connection. It is access to Internet from a network which is not on Internet. The gateway allows 2 different type of network to 'talk' to each other. But the user of Gateway Internet have limited access to Internet. They might no be able to use all tools available on Internet. The local Internet Service Provider (ISP) normally defines this limitation. A good example of network with level one connectivity within India is that of Videsh Sanchar Nigam Limited (VSNL) gateway which is a part of BSNL with sharing of (BSNL) facilities.

2) DIAL UP CONNECTION :-

'Dial up' connection is known as level five connection. This provides connection to Internet through a dial up terminal connection. The computer which provides Internet access known as 'HOST' & the computer that receives access is 'CLIENT'. The client computer uses modem to access at host & acts as if it is a terminal directly connected to that host. Modem access is now widely available & supported by most ISPs. It allows user to surf the web at 56 kps with graphics. So this type of connection is also known as 'Remote Modem Access' connection and the host to which the client gets connection is actually connected to Internet by full line connection.

In setup connection to Internet, host carries all the command through that are typed on client machine & forward them to Internet.

It also receives the data or information from Internet on behalf of 'client' & passes it to them. The client computer acts as 'dumb' terminal connected to remote host.

This type of connection can further divided into 3 categories

① SHELL CONNECTION :-

In this type of connection, user will get only textual matter of Web Page this connection does not support graphics. Display shell account were only type of Internet access available for many years before Internet entered in the world of graphics & become more user friendly.

TCP/IP CONNECTION :-

Today's graphical World Wide Web browser provide easier access with multimedia sound and picture. The major difference between Shell and TCP account is that, shell account can only displays text & does not support graphics display whereas TCP can display both.

ISDN :-

ISDN stands for (Integrated Service Digital Network) offers Internet connectivity at speed of up to 128 kb through the use of digital phone line. ISDN is dial up service that has been provided by telephone companies for many years.

To access any of these dial up accounts you need the following

- Computer
- Modem
- Shell or TCP account for ISP
- Internet client software such as Internet browser etc.

LEASED CONNECTION :-

Leased connection is also known as level three connection. It is the secure, dedicated and most expensive, level of Internet connection with leased connection your computer is securitely and directly connected to Internet using high speed

broadmission lines. It is online 24 hours seven days a week

4) DSL CONNECTION :-

Digital Subscriber line (DSL) is family of technologies that provide digital data transmission over the wires of local telephone network. DSL originally stood for Digital Subsriber loop. In telecommunication marketing, The term DSL is widely understood to mean Asymmetric Digital subscriber line. This is possible because DSL uses highly frequent bands for data separated by filtering on the customers premises; a DSL filter on each outlet removes high frequency interference, to allow simultaneous use of, telephone & data.

The data bit rate of consumer DSL services typically ranges from 26 kbit/s to 40 Mbit/s in this direction to the consumer DSL customer (downstream), depending on DSL technology, line condition and throughput in upstream direction is lower hence designation of asymmetric services. In symmetric Digital Subscriber Line service, the downstream & upstream data rates are equal.

5) CABLE MODEM CONNECTION :-

A cable Modem connection is a type of bridge & modem that provide bi-directional data communication via radio frequency channels on HFC & RFoG infrastructure. Cable modems are primarily used to deliver broadband Internet access in form of cable Internet, taking advantage of high bandwidth of HFC & RFoG network.

They are commonly deployed in Australia, Russia, Asia and Americas. The cable TV company runs a coaxial cable pair from a fiber optic hub

coaxial cable into the following building to deliver their Internet service. Although fed from the same coax that provide cable TV services, most companies place a splitter outside of building and runs two cable in, rather than using a splitter & runs two cable in, rather than using a splitter at set top box. The coax terminates at cable modem.

The cable modem itself attached to SOHO computing equipments via its 10BASE-T port. In most circumstances, the cable modem attaches directly to user's computer. If LAN is present on premises, some sort of router can be connected to cable modem.

6) VSAT

Short for very small aperture terminal, an earthbound station used in satellite communication of data voice & video signals, excluding broadcast television. A VAST consist of 2 parts, a transceiver that is placed outdoors in direct line of sight to satellite and device that is placed indoors to interface the transceiver with end user's communication devices, such as PC. The transceiver or sends a signal to satellite transpond in sky. The satellite sends & receive signals form a ground station computer that acts as hub for system. Each end user is interconnected with hub station via satellite, forming star topology. The hub controls entire operation of network for one end user to communicate with another each transmission has to first go to hub station that then retransmits it via the satellite to another end user's VSAT.

NETWORK DEVICES

1) HUB

Hub is one of basic icon of networking device which works at physical layer & hence connect networking device physically together. Hubs are fundamentally used in networks that use twisted pair cabling to connect device. They are designed to transmit the packets to another appended devices without altering any as pathway to direct electrical signals to travel along. They transmit the information regardless of the fact if data packet is destined for devices connect or not.

Hub falls in 2 categories :

① Active Hub :

They are smarter than passive hubs. They not only provide the path for data signals instead they regenerate, concentrate, strengthen the signals before sending them to their destination. Active hub are also termed as 'Repeaters'.

② Passive hub :

They are more like point contact for wires to built in physical network. They have nothing to do with modifying the signals.

2) Ethernet Hubs

It is a device connecting multiple Ethernet devices together & make them perform the function as single unit. They vary in speed in terms of data transfer rate. Ethernet carries Sense multiple access with collision detect (CD) to control media access. Ethernet hub communicate in half duplex mode where the changes of

data collision are inevitable at most of times

3) SWITCHES

Switches are the linkage point of ethernet network. Just as in hub, devices in switches are connected to them through twisted pair cabling. But the difference shows up in manner both the devices; hub & a switch treat the data they receive. Hub works by sending the data to all ports on device whereas the switch transfer it only to port which is connected to destination device. A switch does so by having a in-built learning MAC so by having a in-built learning connected to it. Since the transmission of data signals are well defined in switch hence the network performance is consequently enhanced. Switch operate in full duplex mode where device can send & receive data from switch at the transmission speed. In switch is double than ethernet hub transferring 10 Mbps connection into 20 Mbps & a 100 Mbps connection to become 200 Mbps. Performance improvement are observed in networking with the extensive usage of switches in modern days.

The following methods will elucidate further how data transmission take place via switches

- Cut through transmission

It allows the packets to be forwarded as soon as they are received. The method is prompt & quick but possibility of error checking overlooked in such kind of packed data transmission.

- Store & forward : In this switching environment the entire packet are received & checked before being forwarded ahead. The errors are thus eliminated before being propagated further. The downside of this process is that error checking takes relatively longer time consequently making it a bit slower in processing & delivering.

- Fragment Tree :-

In fragment free switching environment a greater part of packet is examined so that the switch can determine whether packet has been caught up in collision. After the collision status is determined, the packet is forwarded.

4) BRIDGES

A bridge is a computer network device that builds the connection with the other bridge network which uses the same protocol. It works at the data link layer of OSI Model & connects the different network together & develops communication between them. It connects two local area networks: Two physical LAN into larger logical LAN or two segments of same LAN that use the same protocol.

Apart from building up larger network, bridges are also used to segments larger networks into smaller portions. The bridge does so by placing itself between the two portions of two physical networks and controlling the flow of data between them. Bridge nominate to forward data after inspecting into MAC address of devices connected to every segment. The forwarding of data is dependent on acknowledgement.

of fact that the destination address resides on some other interface. It has the capacity to block the incoming flow of data as well. Today learning bridges have been introduced that build a list of MAC address on interface by observing the traffic on network. This is in development field of manually recording of MAC address.

Types of Bridges

There are mainly three types in which bridge can be characterized.

- **Transparent Bridge**: As the name signifies, it appears to be transparent for the other device on network. The other devices are ignorant of its existence. It only blocks or forwards the data as per MAC address.

Source Route Bridge

It derives its name from the fact that the path which packet takes through the network is implanted within the packet. It is mainly used in token ring network.

Translation Bridge

The process of conversion takes place via translation Bridge. It converts the data format of one networking to another for instance token rings to ethernet & vice versa.

Switches Superseding Bridges

Ethernet switches are seen to be gaining trend as compare to bridge. They are succeeding on the account of provision of

provision of logical division & segmentation in network field. In fact switches are being offered to a multiport bridge because of their advanced functionality.

5) ROUTERS :-

Routers are network layer devices & are particularly identified as layer 3 devices of OSI Model. The process logical addressing information in Network header of packet such as IP Address. Router is used to create layer 3 computer network by complex traffic routers. It has the ability to connect dissimilar LAN's on the same protocols. It also have the ability to limit the flow of broadcasts. A router primarily connects of hardware devices or system of computer which has more than one network interface & routing software.

Functionality :-

When router receive data, it determine the destination address by reading header of the packet once address is determined, it searches in its routing table to get know how to reach the destination & then forwards packet to higher hop on route. The hop could be final destination or another router.

Routing table plays a very pivotal role in letting the router makes a decision. These a routing table is ought to be updated & complete. The two ways through which a router can receive information are :

- Static Routing :-

In static routing, the routing information is fed into routing tables manually. It does not only become a time taking task but gets prone to errors as well. The manual updating is also required in case of statically configured routers when change in topology of network or layout take place. Thus static routing is feasible for tiniest environments with minimum of one or two routers.

- Dynamic Routing :-

For large environment dynamic routing proves to be practical solution. The process involves use of peculiar routing protocols to hold communication. The purpose to these protocols is enable the other router to transfer information about to other routers, so that the other routers can build their own routing tables.

7) BROUTERS

Brouters are combination of both bridge & routers. They take up functionality of the both networking devices services as bridge when forwarding data between networks & services as a router when routing data to individual systems. Brouters function as a filter that allow some data into the local network & redirects unknown data to other network.

8) GATEWAY :-

Gateway is a device which is used to connect multiple networks & passes packet from one packet to other network. Acting as gateway between different networking systems or

computer programs, a gateway is device which forms a link between them. It allows computer programs either on same computer or on different computer to share information across the network through protocols. A router is also gateway, since its protocols to another other such as bridge converts the data into different forms between two networking system. Then a software application converts the data from one formating to another form although data remains unchanged. Gateway might be installed in some other device to add its functionality into another.

9) NETWORK CARD

Network card is also known as 'Network Interface Cards' (NICs) are hardware device that connect a computer with network. They are installed on motherboard. They are responsible for developing physical connection between network & computer. Computer data is translated into electrical signals send to network via Network Interface Card.

They can also manage some important data conversion function. These days network cards are software configured unlike in olden days when drivers were need to configure them even if the NIC doesn't come up with software then latest drives of association software are can be downloaded from internet as well.

10) NETWORK PROTOCOLS

Network protocols define language of instruction & convention for communication between the network device. It is essential that network computer must have one more protocols drivers

Usually, the two connection computer on network. They must be identical protocols. At times, a computer is designed to use multiple protocols. Network protocols like HTTP, IP offers a basis.

System Requirements

- The bus compatibility should be verified on installing NIC into system. The commonly used bus system is Peripheral Component Interconnected.
- Memory I/O address & IRQ are needed.
- Need of drivers if not already installed.

11) ISDN (Integrated Services Digital Network)

ISDN are used to send over graphic or audio data files. It is WAN technology that can be used in place of dial up link. The accessibility of ISDN depends upon the provision of services by the service provider. The quality of line set up to your area. It surely provide higher speed than a modem, & has capability to pick up line & drop it considerably at faster rate.

ISDN can create numerous communication routers on single line. Nowadays, even faster & cheaper technologies that ISDN found their way in realm of technology.

12) MODEMS

Modem is device which converts the computer generated digital signals of computer into analog signals to enable their travelling via phone lines. The 'modulator-demodulator' or modem can be used as a dial up for LAN or to connect to an ISP. Modem can be both external, as in device which connects

to USB or serial port of computer, or peripheral devices for handheld gadgets & other device, as well as internal in form of add-in expansion cards for computer & PCMCIA cards for laptops

Configuration of Modem differs for both the external & internal modem. For internal modems, typically before installation of built-in modem, integrated serial interface are disable simultaneously assigning them COM2 resources.

For external modem of modem assigns & uses the resources itself. This is especially useful for USB port & laptop users as the non-complex & simpler nature of the process renders it far much more beneficial for daily usage.

Upon installation, the second step to ensure the proper working of modem is installation of drivers. The modem working speed & processing is dependent on two factors

Speed of UART -

Universal Asynchronous Receiver or Transmission chip

Speed of Modem itself

Title Study of Web Browser Date : 27-08-18

WEB BROWSER :-

A web browser is a software application for retrieving, presenting and translating information resources on World Wide Web an information resource is identified by Uniform Resource Identifier (URI) that may be a web page, image, audio or other piece of content Hyperlinks present in resources enable users easily to navigate their browser to related resource

INTERNET EXPLORER :-

Internet explorer formerly Microsoft Internet Explorer and windows Internet Explorer commonly abbreviated MSIE, was a series of graphical web browser developed by Microsoft and included in Microsoft windows line of operating system, starting in 1995. It was first released as part of odd on package Plus! for windows 95 that year. Downloads later version was available as free downloads or in service packs, and included in original equipment manufacturers service release on windows 95 and later versions of windows. This browser is discontinued.

Mozilla FIRE FOX :-

Mozilla Firefox is a free open source web browser developed by Mozilla foundation and its subsidiary the Mozilla Corporation. Firefox is available for windows, Macos & Android Linux operating system, with Firefox. For

Android available for Android & uses Gecko layout engine to render web page, which implements w3c standard and anticipate web standard. An additional version does not use Gecko version due to Firefox for iOS, was released in late 2015, but this version does not use Apple's WebKit-based layout engine built into iOS.

What is Difference Between UPLOADING & DOWNLOADING ?

UPLOADING is the process of putting web page, image, file onto web page to make file visible to everyone on internet, you will need to upload it.

DOWNLOADING is the process of getting web page, images, file, from web browser when user are coping this file to their computer. They are downloading it.

They are 3 Different type of downloads

- 1) Pressing ~~ctrl~~ containing down arrow downloads the study's raw DICOM (.dcm) files
- 2) Pressing down arrow to right of button expose two more download option the first option 'Download viewer' will download local viewer contains study images this option will not download raw.dcm file
- 3) The second option in dropdown menu "Download ISO" will download both, dcm file & local viewer containing study's image. Thus, is best option for burning a CD.