

THE BASICS OF THE INTERNET

By Jahid M. S. Sabur

INTERNET has become an essential part of our modern lifestyle. E-mailing is currently the cheapest communication method between people who are thousands of miles away from each other. And e-mail is a part of the works which are done by using the Internet. We use the Internet for browsing, chatting, e-mailing, downloading, and uploading etc. Probably by now most of the educated people of our country know about the importance of Internet in their lives. However, there are many who are not clear about what is the Internet, how it works & how to connect to the Internet.

Due to the Internet technology, the world is indeed becoming a 'Global Village'. Every Internet user knows how easily he/she can walk around in the Information Highway of the World by pressing few buttons on a Computer. People do not need to go to USA or UK to read pages from an Antic book when they can bring the Library of Congress to their desktop only by clicking the mouse of their PC after connecting to the Internet. People of every class are using Internet as their communication device throughout the world. Suppose you want to transfer data from someone who lives in the opposite corner of the world then how should you be doing that? The best & cheapest method is to transfer the data through the Internet.

How does the Internet work? Suppose you have five or six computers in a network with a primary domain controller server computer. Now if the DNS server running in the domain controller is assigned with the top-level domain COM then the complete address of a computer under that domain controller will be HOST.COM where HOST is the hostname of that computer. So, if a web server is running in that computer then the address of that Web Site will be http://host.com/ and all the e-mail for the second level domain anyone@host.com will be sent to the mail server running in that computer. So, each of the five or six computer under the top-level domain COM will have a different host name, address, web site, email addresses, & many more. People using the computers can thus easily communicate between each other. They can send e-mails to others, transfer data, play multi-player games & many more. This is an example of a small Intranet.

You should note that in an Intranet/Internet the host names, domains & DNS servers are used only for easy addressing. But actually the DHCP server running in the domain controller server assigns each computer in a network with a specific IP address. And all the communications are made by the IP address of a computer, which is recorded in the database beside the host name of the computer in the DNS server running in the domain controller. So, when communicating the browser queries the DNS server & finds the IP address of the host to transfer data from the web server running in that host. This is how communication is made in a small network or Intranet.

Many small networks like this are joined together and named as Internet where millions of computers and servers are networked together worldwide by using different media like Optical fibers, Satellites, Coaxial cables, Telephone lines, Radio links and others. Every computer connected to the Internet has a specific IP address between 0.0.0.0 to 255.255.255.0 as assigned by their Continental IP address

maintaining directory like APNIC in Asia & Pacific, RIPE in Europe and ARIN in America. Each ISP is provided with a block of IP address like Spectra Solutions LTD has obtained the block 203.189.254.0 to 203.189.254.255 from Asia's IP directory maintainer APNIC. And when their clients connect to the Internet the DHCP server of Spectra Solutions LTD assigns each client with a different dynamic IP address. Dynamic IP addressing is a system which provides clients with a different IP address than each time they connect to Internet; e.g. If the login "god@ssl-ldt.net" is assigned with IP address 203.189.254.56 now then the next time when this login will be used it will be assigned with a different IP address than 203.189.254.56 which may be any IP address in the block 203.189.254.0 to 203.189.254.255 but not 203.189.254.56. The registry of DNS servers to be used for obtaining the DNS server addresses that is to be used for a specific second-level domain under the top-level domains COM, NET, ORG, or EDU are maintained by the international organization INTERNIC.

So, when we want to go to the web site <http://www.ssl-ldt.net/> the browser software we use looks up the WHOIS Registry, the name of the registry, maintained by the INTERNIC. From the registry the browser gets the name of the DNS servers, which maintains the host record of the computers under that second-level domain. So, the browser thus queries the DNS server and gets the IP address of the host www.ssl-ldt.net and retrieves the web pages from the web server running in that host computer. This is how we view different web sites by using Internet browsing software. When we send an email to someone through our ISP the email first goes to the ISP's SMTP Mail server. The mail server then gets the DNS server address of the second-level domain, where the email is to be transferred, from the WHOIS registry. And then queries the DNS server for the MX record of the domain which contains the host name & IP address of the computer where the POP3 mail server, which is responsible for delivering e-mails for that second-level domain, is running. Thus the email is then sent to that mail server from our ISP's mail server. Later, the receiver for that email will download the email from that mail server. This is how the e-mailing system works through Internet.

Probably I just tried to describe how Internet works to the general Internet users who will feel it too complicated to understand if I would also include the functions of different protocols HTTP, FTP, and use of ports but here I am briefly describing them.

HTTP or Hyper Text Transfer Protocol is used for viewing web pages and we use browsing software like Internet Explorer or Netscape Navigator for transferring data with this protocol through Internet. FTP or File Transfer Protocol is used primarily for transferring files. We download software from FTP servers using FTP software like Absolute FTP or Cute FTP.

Now about ports, each server uses different ports to run & transfer data from different kind of servers, like, Web servers uses the port 80, Ftp server uses the port 21 & telnet servers uses the port 23. There are many other things that is possible to do by using Internet but that will need pages after pages to describe, so, I will stop the description about how Internet works right here. But hope to write more in the future.

Lastly, about how to connect to the Internet, in our country we primarily use dial-up networking for connecting to the Internet. But in foreign countries there are many more ways to connect to the Internet like direct network connection, DSL links, ISDN lines, ZAKNET PC cards, Radio links, Digital data networks, etc.

The speed of Internet is very slow in our country due to the reason that bandwidth of our local telephone lines, which we use for connecting to the Internet, are very low compared to the telephone lines of developed foreign countries.

To get connected to Internet by using dial-up networking you need to have a dial-up account with a local ISP (Internet Service Provider), a local telephone line from BTTB, a computer with Pentium processor, a 56kbps modem, dial-up networking installed in the computer with WIN98 operating system. To use Internet you will need browsing software like Internet Explorer 5.0, Netscape Navigator 4.7, e-mailing software like Outlook Express 5.0, Eudora Pro 4.3, chat softwares like ICQ, mIRC, ftp softwares like Cute FTP, Absolute FTP, downloading add-ons like Getright, GoZilla, etc.

Now I will write about how to configure dial-up network to connect to Internet. Here I am writing only about WINDOWS 98 operating system because of its popularity in our country but there are many other like UNIX, LINUX, Win NT, FreeBSD, Mac, BeOS about which I hope to write in the future.

At first, click the Start button from your desktop to make the start menu to appear. Choose Setting from the start menu and click Control Panel from the cascading menu. From the control panel window double click 'Add/Remove programs' icon and choose Windows setup tab. Select Communications from the list and click on Details. Then check the Dial Up Networking box and click OK & again OK. Thus Dial up Networking will be installed in your computer if it was not installed before. Then open My Computer and then go to Dial-Up Networking by double clicking on its icon. Then double click on Make a new connection. The Make New Connection wizard starts and there you will have to enter some configuration details about your ISP. Enter the name of your ISP in the upper text box and select the modem you want to use for connecting to Internet if you have more than one modem. Click on Configure below your selected modem and the properties window of your modem will appear. Go to the Connections TAB and click on Advanced in the lower right corner. In the Extra settings text box write \$11=40 and click OK to go back to modem properties. Go to the Options TAB of your modem properties window and check the bring up terminal window after dialing box if your ISP uses Unix/Linux operating system in their Access/Remote Access server. Click OK to go back to the Make New Connection wizard and click Next. Enter your ISP's dial-up phone number in the upper right corner and click next. Click Finish to finish connection creation. In general cases no other configuration are required. But for some ISP's DNS server addresses are also needed to be entered.

If someone face any problem in connecting to the Internet in the procedure written above then please email me at expert@bdfast.com at any time you want.

All about CD Recording

By Monzur Morshed

Welcome

Easy CD Creator Wizard guides you step-by-step to make an audio or data CD.

Select Data CD if you want to make a CD containing data files from your computer. This type of CD can be read back on any computer's CD-ROM drive.

Select Audio CD if you want to make a CD containing music. This type of CD can be played back on a home or car CD player.

Click Cancel if you wish to create CDs without using the Easy CD Creator Wizard.

Data CD Audio CD

Next >

Cancel

Help

Writers: Here is a price list of Compro CD Recorders. Sorry because I couldn't get anymore:

ComproCDR Kit 4x/8x with SCSIController = TK 10,000
ComproCDR Kit 8x/20x with SCSIController = TK 12,500
ComproCDR Kit 8x/4x/20x with SCSIController = TK 17,000

* Blank CDs: You need blank CDs to record data in it. The popular brands are Verbatim, Kodak, Imation, Acer etc. Few months ago, I bought a Kodak CD for 100 taka. CDs without a brand name are very cheap on the contrary and cost only around 40 Taka.

* Labels: Having Troubles in identifying your CD? Want attractive labels? Then try Surething CD Labeler now. It is a cool software with which you can design your CD's interface and apply beautiful backgrounds, Logos/Cliparts, Text Effects etc. You can download its shareware version from www.surething.com (you can register it for \$39.95).

* Recording Software: Adaptec Easy CD Creator is an old but popular software for recording CDs. With the Easy CD Creator you can archive data, duplicate a CD, or create an audio CD, etc.

Here's how to use Easy CD Creator:
In the startup, you'll see 2 options: * Audio CD, * Data CD. To make a Data CD, click on that specific option and click next. Then choose the folders/files from your Hard Disk. The total space in a CD is 650 MB but you shouldn't use more than 640 MB. You'll see the amount of available space left in the status bar. Then you'll be asked whether you'll test your CD or not. To save time, pick only "Record CD". It took me 40 minutes to complete recording a CD containing 640 MBs in my HP CD Writer Plus (7500 Series).

To make an Audio CD, click on that specific option and click next. You can select a maximum of 74 minutes of audio. You can only select *.wav files that can be converted to CD Quality sound (44 kHz). You can hear a wav file by double clicking it. Then you can switch to "Jewel Case Layout" option to design the Front Cover or Inside Jacket.

When finished selecting your data/audio files, click on the record button.

GAME REVIEW

The Need For Speed 5: Porsche Unleashed

By Adnan Firoze (adnanf@citechco.net)

After Need for Speed 4, the long anticipated NFS: 5 is here. This time it comes with the name "Porsche Unleashed." This time the shortcomings of the speed of NFS 3 and 4 have been fixed. This game knows no bounds of excessive cars, cool branching tracks and sizzling graphics. It is back with a brand new user interface and a user type save game option.

It's already been graded as the racing simulation of 2000.

DARE TO UNLEASH PORSCHE'S POTENTIAL:

True to the award winning Need for Speed heritage, the latest in the series delivers the next level of mind-numbing open road racing experiences with an extensive collection of cars from the 50-year history of the most storied performance car manufacturer in the world - Porsche. Push every boundary to unleash the potential of these incredible vehicles while weaving through traffic, against fierce competition, and escaping the police to ultimately discover your own limits. Experience the thrill of piloting the historic and future line-up of road and racecars in ways only you could dream.

Join the Factory Testing Crew:

Flat-out, pedal-to-the-metal racing action. Mission-based challenges reward you for exceeding the limits. High-speed thrills with traffic, police, and spectacular crashes. This mode gives you the quality of racing from "Driver" and "GTA" combined. This is my favorite mode anyway. And I have grabbed the role of the Chief Test driver and made Rolf retire. Here you will work with a group of associates. Some are friendly and some are quite jealous.

Let me explain the character of the team that you will work with in this team.

First there is the Senior Test Driver named "Rolf". He is the most "Murubbi" of the team. He is a pure gentleman and will help you through the challenges. Then there is "Klaus". He is the Chief Engineer and Repairman of the Porsche team. He will make you do experimental moves in the latest car at the Skid Pad. After him comes "Dieter" the sales manager. His assignments will be much like the missions that you have played in "Driver". He will make you take cool cars from one place to another with cops at your tales.

These three men are quite friendly. But the characters named Billy and Stephanie are real hard to tackle. Billy is a junior Test driver and will always talk against you. There is no one more "BeAdob" than he in the team is. And at last comes my favorite. The beautiful lady called "Stephanie." She is the Ace driver of the team. She is the best driver of the team and you need to impress her by proving yourself in the challenging Missions.

Porsche Evolution Mode:

Build a career and advance through the history of the world's most storied performance car maker. Buy and sell, upgrade, repair, and maintain your cars. Supply and demand based economy simulates inflation and depreciation. Car history is tracked affecting its future value. Become a master mechanic and an engineering expert. Work with over 700 parts from the official Porsche catalog. You will start in the "Old Age" and make yourself through the "Golden Age" and "Modern Age."

Porsche Collaboration:

Over 80 models from 50 amazing years. So can you believe it?? You will get to play with 80 cars in a single NFS game. That's incredible, isn't it? From the first 356 to the 2000 911 Turbo, the



Stephanie is currently the top test driver on the Porsche roster and is one of the best test drivers of all time. She has proven herself many times and has earned the respect of everyone on the team.

open road courses

Five closed tracks. Each track has thousands of shortcuts to catch your opponent.

GAME FEATURES:

Revolutionary New Game Engine/ New 4-point physics model captures the unique feel of each car/ Stunning 3D cockpits - feel your head thrown back into your seat/ Advanced in-car view simulates realistic head movement/ Enhanced special effects showcase the power of your PC/ New point-to-point courses with branching paths

System Requirements:

Processor: Pentium 2: 333MHz/ Ram: 64 MB/ VGA Card: An 8 MB AGP will do but for better results try a Voodoo based card/ Sound: This game has tremendous sound effects so you surely need a good sound card and a 3D sound speaker to enjoy the music/ HDD Empty Space: 350 MB

Troubleshooting:

First when you start the game normally you will only find 16 cars. Isn't that disappointing. You need to unlock the other 64 cars. So if you want a "Trainer" that unlocks all the cars and tracks then just mail me at "adnanf@citechco.net". The size of the trainer is only 3KB.

If you do not know what this "Trainer" stuff is, then let me explain. It is a little exe patcher that you need to copy to the NFS 5 folder and run the game from that trainer.exe)

(Note: Thanks to Muktashim for this cool game. And I have a message for Muta too - "Hey Mootel I will never EVER pay your 75 taka back")

