## **Chapter 1** The Internet - What Is It?

## The History of the Internet

Many people think that the Internet is a recent innovation, when in fact the essence of it has been around for over a quarter century. The Internet began as ARPAnet, a U.S. Department of Defense project to create a nationwide computer network that would continue to function even if a large portion of it were destroyed in a nuclear war or natural disaster.

During the next two decades, the network that evolved was used primarily by academic institutions, scientists and the government for research and communications. The appeal of the Internet to these bodies was obvious, as it allowed disparate institutions to connect to each others' computing systems and databases, as well as share data via E-mail. The nature of the Internet changed abruptly in 1992, when the U.S. government began pulling out of network management, and commercial entities offered Internet access to the general public for the first time. This change in focus marked the beginning of the Internet's astonishing expansion.

According to a survey conducted by CommerceNet and Nielsen Media Research in early 1997, nearly one out of every four Americans over the age of 16 is an Internet user. And the number of users worldwide is believed to be well into the tens of millions. Other statistics are equally startling:

- A CNN report stated that Internet traffic in 1996 was 25 times what it was just two years earlier.
- The market research group IntelliQuest pegged the number of Internet users in the U.S. in late 1996 at 47 million a 34 percent increase over the first quarter of that year.
- According to IBM, 146 countries currently have at least some level of Internet access.
- The technology research firm IDG estimates that by century's end, *one billion people* worldwide will have access to personal computers—more than doubling the computer-savvy population of 1996.

The Internet explosion coincides with the advent of increasingly powerful yet reasonably priced personal computers with easy-to-use graphical operating systems. The result has been an attraction of recent computer "converts" to the network, and new possibilities for exploiting a wealth of multimedia capabilities.

#### What Kinds of Information are Available?

In addition to text documents, the Internet makes available graphics files (digitized photographs and artwork), and even files that contain digitized sound and video. Through the Internet, you can download software, participate in interactive forums where users post and respond to public messages, and even join "chats," in which you and other users type (and, in some cases, speak) messages that are received by the chat participants instantly.

# **How Do People Use the Internet?**

Obviously, the Internet can bring you a whole host of capabilities. But how can they be put to practical use?

Among the ways that users like yourself are taking advantage of the Internet are:

- Sharing research and business data among colleagues and like-minded individuals.
- Communicating with others and transmitting files via E-mail.

- Requesting and providing assistance with problems and questions.
- Marketing and publicizing products and services.
- Gathering valuable feedback and suggestions from customers and business partners.
- The Internet's potential is limited only by users' vision and creativity. And as the Internet grows, new and innovative uses will surely follow.

Unlike many computer networks, the Internet consists of not one but multiple data systems that were developed independently. The most popular and important systems are:

- E-mail, for exchange of electronic mail messages.
- World Wide Web (www.) Accessing html web pages posted on a server for public access.
- File Transfer Protocol (FTP), a system for storing and retrieving data files on large computer systems
- Internet Relay Chat (IRC), a system for sending public and private messages to other users in "real time"—that is, your message appears on the recipient's screen as soon as you type it.
- CU-SeeMe, a videoconferencing system that allows users to send and receive sound and pictures simultaneously over the Internet. The World Wide Web.

The final component listed here is perhaps the most exciting element of the Internet today. We will learn more about the World Wide Web. . . but primarily we will learn how to surf the Web and use email.

## **Locating Internet Service Providers (ISPs)**

If you already have Internet access but wish to learn about other access providers, go to TAG Online (http://www.tagsys.com/Provider\_provider\_search.html or Mecklermedia's "The List" (http://www.thelist.com/ where you will be able to search databases of U.S. and international access providers by name, geographic location and area code.

If you do not already have Internet access, you will learn here about Internet services that are available in your area. You will also learn how to determine an Internet Service Provider and how to set up your computer to access the Internet and all its services.

# **Determining Your Internet Service Provider (ISP)?**

In order to access the Internet with your computer you must access another computer that acts as a server in a multimillion member web of connections to the world of computers like yours. Most of these server computers are accessible through the telephone system. Some can be accessed through the TV cable systems and the Satellite system. The server computer that you will use to access the internet will be known as your ISP or Internet Service Provider. He maintains a specific Internet address that will become part of your Internet address.

You will most probably access your ISP's server computer through your telephone system known as a "dialup" connection. With the aid of a hardware apparatus called a modem your computer will

"dialup" a telephone number and connect to your ISP's server and connect you to the Internet. This can also be done through your TV cable provider or TV Satellite provider. Special installation software is used in this instance. Once you are connected to the Internet you will be able to connect to one or more of many million other computers.

### **The Internet Addressing System**

Once you have an ISP who has a unique Internet address, you will be assigned a unique address within your ISP's server giving you a unique Internet address of your own. Your unique name or address within your ISP is known as your "User Name." You also will agree upon a "Password" that gives you an exclusive access to your account or "User Name." The term used for connecting to your ISP's server is "logging on." or just "log on."

When using your ISP for e-mail you are assigned a unique e-mail address that is a combination of your User Name and your ISP's address name. For example: billybob@aol.com "Billybob" is your user name and the ISP is "aol.com" This becomes your exclusive e-mail address. No one on the Internet can have the same address.

AOL is one of the largest ISPs with millions of customers or users. Because of the large number of members, it is very difficult to find a unique name on their server. That is why you see so many strange names for e-mail addresses using aol.com as an ISP. AOL is also one of the most expensive ISPs costing about \$24 per month. AOL also maintains an exclusive accessing program that captures you as a customer because you learn to use their program and find it difficult to use or change to the basic programs such as "Outlook Express" for e-mail and "Internet Explorer" for web surfing.

Until recently large ISPs such as AOL, MSN, Earthlink, etc. who have been charging over \$20 per month for Internet access have held their subscribers captive with their exclusive programs. Today you should be able to have Internet access for between \$5 and \$10 per month, but you must learn to use the standard programs such as "Outlook Express" for e-mail and standard web browsers like "Internet Explorer." You must also learn to set up your own "dial up" connection instead of using their self installing programs that take over your computer internet access. They take advantage of your lack of computer knowledge or savvy.

The purpose of this workshop is to change your limited ability and make you Internet savvy. You are no longer going to let your ignorance rob your pocketbook.

It is also the purpose of this workshop to make you proud and considerate of your creations and the ability to make full use of the Internet that gives you the ability to do what you admire about others that you consider so computer "smart."

# How do I get a \$5-10 Internet Service Provider and "Get Smart?"

This workshop manual is printed exclusively for this workshop. It has a date on the cover. Everything in the computer world changes so fast that anything and everything becomes outdated month by month. There is a list of Internet Providers in this manual for our local area that must be changed each time this manual is printed. Programs change and are updated very quickly also. Once you become Internet savvy, learn to surf the net, and subscribe to a few newsletters, you will quickly learn about the best deals available. Your savvy will tune your ear to hear about what is good and what isn't.

At this printing, your local phone companies like BellSouth and Sprint are looking to get your business accessing the Internet. They are a natural for it. They have been lagging behind in soliciting your business. They suddenly realize that AOL and Microsoft have been stealing it away from them when they have all the natural tools already in their system.

DSL is the "Hot Item" right now. DSL as well as the cable company systems (Road Runner etc.) allow Internet speeds about 10 times faster then regular dial-up. Internet savvy surfers find this high speed very desirable. If you are a"Newbee" you probably won't know the difference until you have been doing it a while. DSL costs a lot more . . . at least 5 times more than regular dial-up. This is part of the decision you will have to make.

Dial-up is also going through with some exclusive features that make for some exciting reasons for keeping savvy. Internet surfing can be up to 5 times faster with a new "Accelerated" software program that dial-up providers have been charging an extra \$5 per month. Caller ID programs for dial-up give you some of the advantages that DSL has had for an advantage in the past.

If you have a newer modem or newer computer a V92 modem technology, your caller ID system can give you the ability to allow you to answer a phone call while you are on line. Not missing a phone call has been one of the plus features of DSL. Your dial-up connection can now give you a similar advantage.

BellSouth and Sprint are offering a dial-up connection for only \$4.95 per month on your phone bill if you buy their plus features like unlimited long distance etc. The accelerated software and call ID V92 features are included. Don't overlook this deal if your shopping for an ISP.