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FYI on Questions and Answers
Answers to Commonly AskedNew Internet User Questions

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Abstract

   This memo provides an overview to the new Internet User. The
   intended audience is the common Internet user of today, thus it
   attempts to provide a more consumer oriented approach to the Internet
   rather than going into any depth about a topic. Unlike its
   predecessors, this edition seeks to answer the general questions that
   an unsophisticated consumer would ask as opposed to the more pointed
   questions of a more technically sophisticated Internet user. Those
   desiring a more in-depth discussion are directed to FYI 7 that deals
   with intermediate and advanced Q/A topics. A conscious effort has
   been made to keep this memo brief but at the same time provide the
   new user with enough information to generally understand the
   Internet.

1. Acknowledgements

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2. Questions About the Internet

2.1. What is the Internet?

People use computers to perform a wide assortment of tasks. A
connected group of computers is known as a network. Because people
are connected via this network, they can use their computers to
exchange ideas and information. Some computers are connected
directly to the network while others (primarily those in homes) are
connected via a telephone line and a communication device known as a
modem. By connecting networks together with specialized computers
known as routers, people on one network can engage in activities with
people on other networks. This INTER-connected group of NETworks is
known as the INTERNET.

2.2. What Can I do on the Internet?

There is a large variety of activities that users can do on the
Internet. These activities include surfing, searching, sending mail,
transfering programs and documents, chatting, and playing games.

SURFING

Surfing is one of the most popular Internet activities. To surf, a
user needs a program known as a web browser. The web browser enables
the user to connect to a location that contains information. Many
locations contain links to other sites that contain related
information. These links are usually identified by underlined text
that is of a different color from the rest of the text in an article.
By clicking on one of these links the user is then connected to that
information. This information may be at the same location or may be
at a different location. This new information may, in turn, have
links to other information. So just like a footnote or reference in
a print publication, links can be used to find related or non-related
information.

SEARCHING

Searching involves using a special program known as a seach engine.
There are several of these engines that are located at various search
sites. The popular web browsers have location information about
these search sites. Searching is similar to using a card catalog in
a library. Just as a person would look up a topic in a card catalog
and find one or more references to that topic with library location
information, a search engine provides the user with a list of sites
that may contain relevant information. This list is actually a set
of links to these sites so that all the user has to do is click on
the link to go to the location. Just as different library card
catalogs will contain different reference cards, different search
engines will provide different reference lists.

E-MAIL

E-mail is another very popular activity. It is very similar to
sending letters through the post office or notes and memos around the
office. It is used to exchange messages between two or more people.
Because email can be misunderstood or abused, users should be
familiar with email netiquette. For more information see Netiquette
Guidelines [FYI 28, RFC 1855].

Many people also participate in mailing lists. Usually a mailing
list is dedicated to a particular topic or interest. Some mailing
lists are used to provide information to subscribers, such as product
update information for something an individual may have purchased
while others are used for discussion. In the latter instance people
participate in the discussion by sending email to a "list" address
which in turn distributes it to all members of a list. Abuse of mail
lists is probably the biggest source of junk email (also known as
"spam"). Everyone should take care that they aren't the source of
junk mail.

FILE TRANSFER

Programs and documents are transferred in several ways. The most
common way this is done between individual users is to attach the
program or document to an e-mail message. Programs and documents are
usually transferred from sites to users using the save feature of a
web browser or the file transfer protocol (FTP).   Such transfers
enable users to obtain a variety of programs, documents, audio files,
and video files.

CHAT

Chat takes place between one or more persons who are on the Internet.
Chatting is very similar to going to a party. Just as people
congregate in small groups and discuss things, chatters meet in chat
rooms to discuss a topic. Chat rooms are generally sponsored or
operated by an organization that has an interest in the topic area.
For example, an online news organization would have a chat room for
chatters to discuss current events. To chat one person writes a
message which can be read, as it is being written, by the others who
can respond to it in turn. First time chatters should be aware that
just as at a party where some people never say anything, so there may
be people in the room who are just listening. Also, just like at a
party, some people may portray themselves to be someone different
than who they really are. Lastly, remember that chatters come and go
to chat rooms the same way people move about groups at a party.

GAMES

Some people use the Internet to play games. These games can be role
playing games, action/adventure games, or online versions of old
standbys like chess. Some games require the user to purchase a copy
of the game and install it on their computer, while others are played
by going to a game site. Just like other forms of game playing,
Internet game playing can be challenging, entertaining, and an
enjoyable social experience. Don't be afraid to have fun.

OTHER ACTIVITIES

Other popular activities include electronic shopping, banking, and
investing. Many retailers describe and display pictures of their
products on the Internet enabling people to buy on line. Shopping
also includes purchasing services such as an airline ticket or
ordering groceries. Many banks allow people to transfer funds, check
available funds, pay bills and other such activities while on the
Internet with an account number and ID. Lastly, many people invest
while on the Internet in everything from stocks and bonds to real
estate. One word of caution, if you are using a credit card, check
to see if there are security features in place to protect your credit
card information. Reputable sites should tell you how they are
protecting your information. If you are in doubt about how your
information will be protected, don't use your credit card at that
site.

2.3. What is an Address?

Two commonly asked questions these days are "What's your e-mail
address?" and "What's the URL?" Generally, the first question is

asking where to send information, while the second is asking where to
get information. The answer to the first question is usually
something like myname@company.com. The answer to the second question
is usually something like "http://www.newspaper.com". What do these
answers mean?

E-MAIL ADDRESS

As stated previously an e-mail address is something like
"myname@company.com", pronounced "MYNAME at COMPANY dot COM". An
email address consists of two parts that are divided by an "@" sign.
The portion to the left is like the name line on a letter, it
identifies a particular person and usually is composed of the
person's name. Typical names look like this:

    john_doe
    john.doe
    jdoe
    doej

The name is assigned by the system or network adminstrator who is
managing the email system and follows rules that have been
established by the company providing the e-mail service. Sometimes
the name portion of the e-mail address is referred to as a mailbox.

The portion to the right of the "@" sign is the name of the computer
system that is providing the e-mail service. This name is usually
the name of the company that owns the computer system followed by a
"dot" and an abbreviation that represents the "domain" or group of
names which the organization falls under. Examples of these "top
level" domains are "edu", "com", and country codes such as "fr" for
France and "jp" for Japan. When an e-mail is sent the portion of the
address to the right of the "@" sign is used to find the destination
computer of the email.

URL

A Uniform Resource Locator (URL) is commonly used to identify a
computer that provides world wide web service. It usually looks
something like "http://www.newspaper.com". This address also
consists of two parts. In this case the two parts are separated by
the "//". The portion to the left means find the world wide web
service that is located at the computer identified to the right of
the "//". The portion to the right is the name of the computer that
is providing the world wide web service. Its name is composed of
parts that are similar to those described for the name of an email
computer. Sometimes the portion on the right contains additional
information that identifies a particular document at the web site.

For example, http://www.newspaper.com/sports/article1.html would
identify a specific article in the sports section of the newspaper.

2.4. Are There Any Rules of Behavior on the Internet?

In general, common sense, courtesy, and decency govern good Internet
behavior. There is no single formal rulebook that governs behavior on
the Internet. FYI 28 that was mentioned previously is a good guide.
Many activities such as game sites, chat rooms, or e-mail lists may
have rules of their own. What may be acceptable behavior in one chat
room may be totally out of bounds in another. It never hurts to
check the water temperature before jumping in the pool. Users should
use the same precautions before joining in any online activity.

E-mail in particular can lead to misunderstandings between people.
Users should remember that the reader only has the text to determine
what is being said. Other conversation cues such as "tone of voice"
and body signals like winking are not present in the text. Because
of this, users of the Internet have developed cues to put in the
text. Text techniques such as capitalization and symbols known as
emoticons (also called "smilies") are used.

  A typical smiley looks like this :-)

Additionally, acronyms have evolved over time (for example IMHO - In
My Humble Opinion). More information about this can be found by
searching. Use keywords like "netiquette" and "emoticon" with your
search engine to find more information.

Users should also be aware that their particular programs such as
word processors or e-mail might produce documents and messages that
are not readable by everyone. Very often, a reader must have the
same program in which a document was written in order to read it.
So, before sending an attached document, it is a good idea to make
sure that the intended receiver of your document has the capability
to read it. If in doubt, send a text (ascii) version of the
document.

2.5. How Does the Internet Work?

Each of the activities mentioned in the section describing what one
can do on the Internet requires that computers exchange information.
Computers take turns sending and receiving information. When a
computer is sending information, it is known as the "source"; when it
is receiving information, it is known as the "destination." (The
same computer can be both a source and destination at different
times. This is especially clear when one thinks of sending and
receiving e-mail.)

Every computer on the Internet has a unique Internet "address" that identifies it from among the millions of computers. The Internet has specialized computers between the source and destination located at network inter-connection points. These computers are known as "routers." The routers understand how to use a computer's address to appropriately point information from one computer to another over the Internet.

In an exchange of information the following occurs:

* The source finds the address of the destination.

* The source contacts the destination and says "hello".

* The destination responds back with a "hello" of its own.

* The source tells the destination that it has information to send.

* The destination tells the source that it is ready to receive the information.

* The source breaks the information into small pieces called packets and sends each packet on its way to the destination.

* The routers guide each packet to the destination.

* The destination takes the packets and puts them back together to form the information.

* The destination tells the source that it has received the information and asks the source if it has anything more to send.

* If the source says no, the destination will say "good bye" unless it has something to send back. If it does, it will break the information into packets and send them.

* Once both end users are done "talking", they say both say "good bye".

Clearly our simplified introduction to this section did not explain many steps in this process, such as how a computer discovers the address of another computer or how packets are divided and reassembled. Fortunately, these are specifics that people using the Internet never really need to deal with!

2.6 Who Runs the Internet?

   No one. The Internet is a cooperative effort among Internet Service
   Providers (ISPs), software companies, volunteer organizations, and a
   few facilities that tie the whole thing together. The ISPs and
   software companies are completely independent and most of them
   compete with each other. The ISPs provide internet service to people
   much the same way that they obtain telephone service from a telephone
   company. ISPs agree to connect their networks to each other and
   transmit information following an established set of rules
   (protocols). The software companies agree to manufacture programs
   (such as email or web browsers) that also follow protocols. There
   are other organizations that keep things straight. Some assign
   Internet addresses in much the same manner as telephone numbers are
   assigned, others keep track of names used by Internet users and
   groups, and a large volunteer organization called the Internet
   Engineering Task Force (IETF) develops the protocols computers follow
   to make network communications succeed.

3. Security Considerations

   The question "is the Internet secure?" can be a confusing one for
   people, who will hear many assurances that it is secure and many
   scary stories saying it is not secure. There are a few basic rules
   of thumb to remember that will address most concerns.

   First, make it a rule never to share account passwords with anyone.
   Learning a password is the easiest way for someone to break into a
   system. Most people feel that their files are not that interesting
   to anyone, but someone may be able to get a foothold from one
   innocuous account to other places in the same computer system. Many
   good security practices can be found in the User's Security Handbook
   [FYI 34, RFC 2504].

   Second, understand that there are means for people to track the
   information a user sends via email, the files one downloads, and the
   sites visited on the web. The system administrators and network
   engineers who oversee a sites' computers require access to
   information that an individual may think is secret. In practice, no
   responsible system administrator or network engineer will violate a
   person's privacy out of personal curiosity. However, if someone less
   legitimate attains illegal access to a system, they also will have
   access to this information. This situation is not a problem for most
   people, but it should be understood that things like email sent a
   year ago or a log of users web pages browsed may still exist in some
   system's backup archive tape and can be easily resurrected and

published widely.

Third, before giving personal information over the Internet, such as
filling in a form on a Web page, users should realize that there is
no assurance of confidentiality or privacy.   It could be compared to
faxing such information to a party that you've never dealt with
before. While many organizations on the Internet are responsible
with information received via the web and email, this cannot always
be determined in advance.

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Appendix A
Glossary of Terms

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   Emoticon      Combination of punctuation marks used to provide sense of
                 the senders tone of voice in an e-mail message
   IETF          Internet Engineering Task Force [see text for a description]
   Internet      An interconnected group of networks
   ISP           Internet Service Provider [see text for a description]
   Network       A connected group of computers
   Router        A specialized computer that connects networks together and
                 guides information packets to their destination
   Spam          A slang term for junk e-mail
   URL           Uniform Resource Locator [see text for a description]
   Web Browser   A program that provides the capablility to read
                 information that is located at a world wide web site
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