

# Internet

## 1. Connections

### A. Dial-up

Electronic device that converts digital data into analog (modulated-wave) signals suitable for transmission over analog telecommunications circuits (e.g., traditional phone lines), and demodulates received analog signals to recover the digital data transmitted. The "modulator/demodulator" thus makes it possible for existing communications channels to support a variety of digital communications, incl. E-mail, Internet access, and fax transmissions. An ordinary modem, operating over traditional phone lines, has a data transmission speed limit of about 56 kilobits per second.

### B. DSL

Broadband digital communications connection that operates over standard copper telephone wires. It requires a DSL modem, which splits transmissions into two frequency bands: the lower frequencies for voice (ordinary telephone calls) and the upper band for digital data, especially for connection to the Internet. Data can be transferred via DSL at much higher rates than with ordinary dial-up modem service; the range of DSL signals, however, is very small. Connections can be made only within a few miles of the nearest transmitting station. DSL and "xDSL" are umbrella terms under which a variety of protocols and technologies fall. ADSL (Asymmetric DSL) is a popular type of DSL in which most of the bandwidth of the connection is devoted to downloading data from the network to the user, leaving only a small-scale connection for uploading data. In HDSL (High bit-rate DSL) and SDSL (Symmetric DSL) the data stream is symmetric; that is, the upstream and downstream rates are the same. UDSL (Unidirectional DSL), VDSL (Very high data rate DSL), and others still under development are intended to offer even greater rates of data transmission.

### C. ISDN

Digital telecommunications network that operates over standard copper telephone wires or other media. ISDN connections are used to provide a variety of digital services to customers, incl. digital voice telephone, fax, E-mail, digital video, and access to the Internet. A wide range of data transfer rates are available, with speeds up to about 128 kilobits per second (kbps). ISDN is faster than an ordinary dial-up connection (at about 56 kbps), but much slower than cable modem or DSL connections (which typically exceed one megabit per second).

### D. Cable

Modem used to convert analog data signals to digital form and vice versa, for transmission or receipt over cable television lines, especially for connecting to the Internet. A cable modem modulates and demodulates signals like a telephone modem, but is a much more complex device. Data can be transferred over cable lines much more quickly than over traditional phone lines. Transmission rates are typically around 1.5 megabits per second. Faster transmission is actually possible, but speed is usually restricted by the cable company's (typically slower) connection to the Internet. Cable Internet access is regarded as a replacement for slower dial-up and ISDN services, and is competitive with other broadband modes of delivery (e.g., DSL connections).

## 2. Service Providers

Company that provides Internet connections and services to individuals and organizations. For a monthly fee, ISPs provide computer users with a connection to their site (see data transmission), as well as a log-in name and password. They may also provide software packages (such as browsers), E-mail accounts, and a personal Web site or home page. ISPs can host Web sites for businesses and can also build the Web sites themselves. ISPs are all connected to each other through network access points (NAPs), public network facilities on the Internet backbone.

<http://free-isp-internet-access.net/index.shtml>

<http://isp-lists.isp-planet.com/>

<http://www.findanisp.com/>

## 3. Browsers

A program that accesses and displays files and other data available on the Internet and other networks.

### A. Netscape

<http://home.netscape.com/>

### B. Microsoft Internet Explorer

<http://www.microsoft.com/>

### C. AOL

<http://www.aol.com/>

**Mozilla**

**Opera**

**MSN Explorer**

**Amaya** - testbed browser

**Lynx**

**HotJava**

**Arena** - an HTML3 browser

**iCab** - web browser for Macintosh

## 4. Websites

Collection of files and related resources accessible through the World Wide Web and organized under a particular domain name. Typical files found at a Web site are HTML documents with their associated graphic image files (GIF, JPEG, etc.), scripted programs (in Perl, CGI, Java, etc.), and similar resources. The site's files are usually accessed through hypertext or hyperlinks embedded in other files. A Web site may consist of a single HTML file, or it may comprise hundreds or thousands of related files. A Web site's usual starting point or opening page, called a home page, usually functions as a table of contents or index, with links to other sections of the site. Web sites are hosted on one or more Web servers, which transfer files to client computers or other servers that request them using the HTTP protocol. Although the term "site" implies a single physical location, the files and resources of a Web site may actually be spread among several servers in different geographic locations. The particular file desired by a client is specified by a URL that is either typed into a browser or accessed by selecting a hyperlink.

## A. Cookies

Web cookies are simply bits of software placed on your computer when you browse websites. Not all websites have these, but many do, especially the large well-known websites. Websites use cookies so they can track what you are viewing, and although they won't necessarily know you by name (lets hope it never gets to that point), the website will recognize your computer when you come back to visit again.

<http://cookiescache.tripod.com/>

<http://www.cookiecentral.com/content.phtml?area=2&id=1>

## B. Search Engines

Internet search engines are often referred to as “portals” because they are the places that have become the entry point for millions of internet users, who utilize these massive web sites to find internet-based information and receive personalized online services.

Yahoo	<a href="http://www.yahoo.com/">http://www.yahoo.com/</a>
Excite	<a href="http://www.excite.com/">http://www.excite.com/</a>
AltaVista	<a href="http://www.altavista.com/">http://www.altavista.com/</a>
HotBot	<a href="http://www.hotbot.com/">http://www.hotbot.com/</a>
Lycos	<a href="http://www.lycos.com/">http://www.lycos.com/</a>
MSN	<a href="http://www.msn.com/">http://www.msn.com/</a>
Snap	<a href="http://www.snap.com/">http://www.snap.com/</a>
WebCrawler	<a href="http://www.webcrawler.com/">http://www.webcrawler.com/</a>
Go Network	<a href="http://www.go.com/">http://www.go.com/</a>

## C. Search Strategies

Some businesses by their nature are more appropriate for search engine marketing. These businesses normally have these characteristics: 1) They sell specialized or niche-related products or services; 2) They market nationally or internationally; and 3) They are able to develop a unique set of keywords to describe their businesses.

It is important to remember that search engines are based on words and words alone. Therefore, the only tools at your disposal are the words you use to describe your business. If those words are not unique in their nature, the prospect of being listed high on most search engines is unlikely.

## 5. Security

Computer security system that controls the flow of data from one computer or network to another. Firewalls are mainly intended to protect the resources of a private network from being directly accessed by a user from an external network, especially via the Internet. Users inside the private network may also be prevented from directly accessing external computers. To accomplish this, all communications are routed through a "proxy server" that determines whether a message or file will be allowed to enter or exit the private network.

[www.knowledgestorm.com](http://www.knowledgestorm.com)

[www.gfisoftware.com](http://www.gfisoftware.com)

[www.checkpoint.com](http://www.checkpoint.com)

<http://www.firewall.com/>

## 6. **Viruses/Protection**

Computer program designed to copy itself into other programs, with the intention of causing mischief or damage. A virus will usually execute when it is loaded into a computer's memory. On execution, it instructs its host program to copy the viral code into any number of other programs and files stored in the computer. The corrupted programs may continue to perform their intended functions while also executing the virus's instructions, thus further propagating it. The infection may transfer itself to other computers through storage devices, computer networks, and on-line systems. A harmless virus may simply cause a cryptic message to appear when the computer is turned on; a more damaging virus can destroy valuable data. Antivirus software may be used to detect and remove viruses from a computer, but the software must be updated frequently for protection against new viruses.

<http://mcafee.com/>

<http://norton.com/>

Trend Micro, Inc. \_ PC-Cillin

Carmel \_ Anti-Virus

Dr Solomon \_ Anti virus

Elia Shim \_ VirusSafe

Frisk \_ F-PROT

## 7. **E-mail**

Messages and other data exchanged between individuals using computers in a network. An E-mail system allows computer users to send text, graphics, and sometimes sounds and animated images to other users. It developed from large organizations using an internal messaging system as a communication link among employees. The mass provision of E-mail addresses for private individuals by Internet service providers led to the development of E-mail as a system to supplement or replace communication by letter.

[www.yahoo.com](http://www.yahoo.com)

[www.hotmail.com](http://www.hotmail.com)

## 8. **Chat/IMM's**

Real-time conversation among computer users in a networked environment such as the Internet. After a user types a text message and presses the Enter key, the text immediately appears on the other users' computers, permitting typed conversations that are often only somewhat slower than normal conversation. A chat can be private (between two users) or public (where other users can see the messages and participate if they wish). Public chatting is conducted in "chat rooms," Web sites devoted to chat, usually about a specific topic. The thousands of chat rooms now available.

ICQ

Yahoo Instant Messenger

MSN Instant Messenger

AOL Instant Messenger

PALTALK

## 9. UBB's

Computerized system used to exchange public messages or files. Most are dedicated to a special interest, which may be an extremely narrow topic. Any user may "post" his or her own message (so that they appear on the site for all to read). Bulletin boards produce "conversations" between interested participants, who may download or print out messages they desire to keep or pass on to others. Bulletin boards sites today number in the tens of thousands.

<http://lexx.nbm.com/index.php?page=aemsg&select=Discussions>

## 10. E-Bay

<http://www.ebay.com/>

## 11. Free Software/Tools

<http://shareware.cnet.com/>

**A. Win Zip**

**B. Acrobat**

**C. PKZip**

**D. PSP**

**E. Fonts**

**F. Clipart**

<http://clipart.com/>

<http://visualparadox.com/>

<http://www.unleash.com/>

### 1. Vector

EPS	Encapsulated Post Script
WMF	Windows Meta File
CDR	Corel Draw File
HPGL	Plotter File
DXF	Auto Cad File

### 2. Raster/Bitmaps

Types of Bitmaps:

- |    |                       |                            |
|----|-----------------------|----------------------------|
| a. | 1 bit Black and White | 2 colors – Black and white |
| b. | 4 bit Color           | Any 16 colors              |
| c. | 8 bit Gray Scale      | 256 shades of gray         |
| d. | 8 bit Paletted        | Any 256 colors             |
| e. | 16 bit RGB            | Any 65536 colors           |
| f. | 24 bit RGB            | Millions of colors         |
| g. | 32 bit CMYK           | Billions of colors         |

As the number of colors goes up, so does the file size.

### BMP

The file extension for a Windows bitmap file. Although the .BMP file extension indicates the native bitmap format of Windows, it is also supported by many non-Windows and non-PC applications. A bitmap file stores virtually any type of bitmap data.

## **JPG**

Established by the JPEG (Joint Photographic Experts Group), this format is an international standard for compressed photographic images. It offers compression with minimal loss of image quality. Because of their essentially less compression (20 to 1) and small file size, JPEG images are widely used in Internet publishing.

## **TIFF**

Tagged Image File Format. A file format developed for page-layout applications that is supported by all image-editing applications. TIFF files can save RGB, CMYK, and Lab color mode information, but not duotones.

## **GIF**

Graphics Interchange Format. Originally developed by CompuServe, .GIF is a graphic file format designed to use a minimum of disk space and be easily read and exchanged between systems. This format is commonly used to publish images of 256 colors or less to the Internet.