

Internet 101

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**Editors note: This is a column I'm going to run for the next few months. The column will cover the basics and history of the Internet but will also have information for experienced users.*

What is the Internet?

The Internet is a network of networks. It allows for communication and sharing of information. A variety of different applications work on the Internet including the World Wide Web (www) and email. The Internet is made up of local and regional Internet Service Providers (ISPs), regional networks, the US Commercial Backbone, and National Access Points all connected together.

How did it get started?

1962: The Internet was conceived by the Department of Defense's advanced Research Project Association (DARPA) to allow sharing of data and to access remote computers.

1969: The first host computers that were hooked up to ARPANet were Stanford Research Institute, UCLA, UCSB, and the University of Utah.

1971: Email is the most popular application. The number of hosts grows to 23.

1973: ARPANet goes international with the addition of the University College in London and the Royal Radar Establishment in Norway.

1979: The first newsgroups are formed.

1981: The number of hosts grows to 213.

1982: The term Internet is used for the first time.

1988: The number of hosts grows to 60,000 but the "Internet Worm" brings down 6,000 machines.

1989: Hosts grow to 100,000

1990: ARPANet is decommissioned leaving only the Internet.

1991: Previous ban on commercial use is lifted and Tim Berners-Lee (CERN) releases the first version of the code behind the World Wide Web.

1993: The Mosaic browser is released. This allows for widespread use of the Web. Traffic on the Internet grows 314,634%.

1996: Over 150 countries around the world are on the Internet. The number of host nears 10 million.

1998: Nearly 30 million host computers on the Internet and growing.

How do computers communicate on the Internet?

Computers use a specific set of formats called protocols to communicate on the Internet. These protocols, such as smtp (email), http (web), and nntp (newsgroups), allow the Internet to be used in a number of ways.

How does it work?

Information is broken up into small units (packets) according to the TCP (Transmission Control Protocol) before transmission and then reassembled at it's destination according to the IP (Internet Protocol.)

How do I get connected?

There are three things you need:

A computer:

- PC: 386 or better (hopefully much better!)
- Macintosh: 7.0, Mac II or better (iMac is a great choice!) (Your Internet experience will be better with a fast computer and a large hard drive.)
- Web TV is also an option

A connection to the Internet using one of the following:

- Internet Service Provider (ISP) connection using SLIP/PPP via telephone modem
- Online Service such as AOL or Compuserve
- Local Area Network (LAN) connection
- ISDN/Cable Modem

Software to connect and browse:

- TCP/IP software which is standard on most operating systems
- Application software such as Netscape or Internet Explorer

How do I choose between an ISP and an Online Service?

An ISP provides you only with a connection. Typically, you will use commercial or licensed software to complete your Internet tasks.

Pros: Direct access to the Internet

Cons: Less user friendly

An Online service gives you an Internet connection which allows you to perform "most" of the typical Internet activities. All of the software is bundled together. Online Services also produce their own content.

Pros: Easier to use

Cons: Extra layers of pages between you and the Internet

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