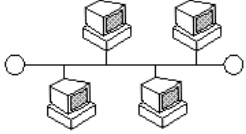
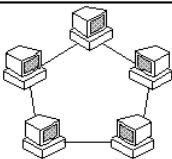
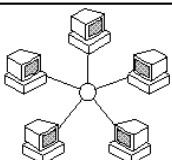


## Definitions

Even more about the Internet

16 February 1999

<b>backbone</b>	A physical network link (wire) with a lot of bandwidth; can carry a lot of data. Also refers to the Internet's high speed data "highways" that serve as major access points to which other networks connect. <i>I.e.</i> , ISPs are often connected to one another via an Internet backbone.
<b>bandwidth</b>	A measure (in bits per second) of the amount of data that can flow across a network connection at a time. <i>E.g.</i> , Networks using 10Base-T Ethernet cabling have a bandwidth of 10 megabits per second (Mbps); networks using 100Base-T Ethernet cabling (a.k.a. Fast Ethernet) have a bandwidth of 100 Mbps.
<b>bit</b>	Put simply, a 0 or a 1.
<b>bus network</b>	A network in which all nodes are connected to a single bus (wire). See right. 
<b>byte</b>	8 bits.
<b>DNS server</b>	<i>Domain Name System server</i> . A computer that translates IP addresses into fully qualified domain names, and vice versa.
<b>Ethernet</b>	A protocol (language) that most network cards "speak" when transferring data over a network. This protocol can be spoken over any network architecture: bus, ring, or star. It can also be spoken over different types of cable: twisted-pair, fiber-optic, <i>etc.</i>
<b>firewall</b>	A computer that prevents unauthorized users on the Internet from reaching files and programs on a company's intranet. Employees behind the firewall can usually access Internet services, but they can't provide services ( <i>e.g.</i> , file sharing) to people outside the firewall. Since outsiders can't get past a firewall, any files that the company wants to be public ( <i>e.g.</i> , Web pages) must be put outside of the firewall.
<b>fully qualified domain name</b>	The full logical name of a computer on the Internet; not just its hostname. For example, <code>www.cnn.com</code> is the fully qualified domain name of CNN's Web server, while <code>www</code> is the hostname of CNN's Web server.
<b>giga-</b>	Represents 1,000,000,000; prefixed to words. For example, 1 gigabit equals 1,000,000,000 bits.
<b>hostname</b>	The logical name of a computer on the Internet. By convention, the hostname of most Web servers is <code>www</code> .
<b>hub</b>	A device to which you connect several computers in order to form a network.
<b>IP address</b>	A numerical address of the form <code>#.#.#.#</code> (where <code>#</code> is a number between 0 and 255) that uniquely identifies a computer on the Internet.

<b>ISP</b>	<i>Internet Service Provider.</i> A company that provides home and business computer users with dial-up (modem) access to the Internet. ISPs often provide subscribers with one or more e-mail addresses as well as storage space for personal Web pages ( <i>i.e.</i> , home pages).
<b>kilo-</b>	Represents 1,000; prefixed to words. For example, 1 kilobit equals 1,000 bits.
<b>LAN</b>	<i>Local area network.</i> A network of computers within a small area. Essentially, an intranet.
<b>mega-</b>	Represents 1,000,000; prefixed to words. For example, 1 megabit equals 1,000,000 bits.
<b>modem</b>	A device that allows you to connect to the Internet (via an ISP) over phone lines. The speed of a modem is measured in bits per second. For example, a “28.8 modem” can transfer data at 28,800 bits per second (28.8 kbps).
<b>network card</b>	A.k.a. network interface card (NIC). A.k.a. LAN adapter. A circuit board that you put inside your computer to give your computer network capabilities. A network card adds a port (socket) to the back of your computer, to which you can connect a network cable. Ethernet cards are the most popular type of network cards.
<b>node</b>	Put simply, a computer on a network.
<b>peer-to-peer network</b>	A type of network in which each computer has equivalent capabilities and responsibilities. This setup differs from client-server architectures, in which some computers are dedicated to serving the others. Peer-to-peer networks are generally simpler and less expensive, but they usually do not offer the same performance under heavy loads. Building a peer-to-peer network can consist of connecting your laptop computer to your desktop computer with a cable.
<b>PPP</b>	<i>Point-to-point protocol.</i> A protocol (language) that most modems “speak” when transferring data over phone lines.
<b>ring network</b>	A network in which all nodes are arranged in a ring. See right. 
<b>router</b>	A computer that routes data from one computer to another on a network. A.k.a. gateway.
<b>star network</b>	A network in which all nodes are connected to a central point. See right. 
<b>TCP/IP</b>	The language spoken by computers on the Internet when exchanging data.
<b>WAN</b>	<i>Wide area network.</i> A network that connects computers over a large geographic area; a network of LANs. Essentially, an internet (a network of intranets).