# TRANSLATION, PLEASE

AMPTER: Your PC also has a hard time speaking the lingo. So it needs its own translator, which converts information to tidy packages that neatly flow down network wires (see Packet). Every PC on a corporate network has one of these adapters, which come in the form of circuit boards that cost \$50 at the low end to more than \$1,000 for superfast communications.

ATM: Though cash machines run on data networks, this ATM has nothing to do with banks. Short for asynchronous transfer mode, it's a new way of designing data packets that's particularly suited to sending video and audio information as well as text. Besides offering very high speed, ATM is attracting attention because it is favored by phone companies, cable operators and corporate computer users alike, which may make for easier networking between offices and homes.

**RACKDONE:** A set of wires running between buildings to link computers in one site to those in another, much as the spinal cord sends messages to various parts of the human body. Smaller networks branching out from the backbone are sometimes called ribs.

**BANDWISTN:** A measure of how fast a network can move information, usually measured in thousands or millions of bits, or units of data, per second.

WFF: Shorthand for one of the more catastrophic events to interrupt a network: backhoe-induced fiber failure, when a low-tech excavating machine severs a high-tech data pipeline. (See Fiber.)

together two or more networks, generally ones that use the same scheme for packaging and sending data. (See Router.)

and time to move large amounts of voice, data and video. Broadband technology lets different networks coexist on a single piece of heavy-duty wiring. It isolates signals as a radio does; each one vibrates at a different frequency as it moves down the line. Its opposite is baseband, which separates signals by aending them at timed intervals.

emandant sterm: A peculiar affliction of computer networks. Computers, for various reasons, occassionally malfunction and start spewing out mindless data. When that happens, the traffic jam clogs up the network.

SLEER Not a lawyer's victim. A client is usually a PC that communicates over a network both with its peers, other clients, and with a larger computer, called a server, which typically stores data that many workers need to use. The client has just one user, the server many. (See Server.)

CLEAT-SERVER COMPATION: The use of these combinations of large and small computers to make big mainframe machines obsolete. (See Peer-to-Peer.)

coarni came: Better known as coax, this is the old, fat wire used by cable TV companies and some data networks. It has more canacity than standard con-

FDDI? Router? Token Ring?
An English-language
introduction to networks.

### ET BON CLARK

ND YOU THOUGHT ordinary computer jargon was bad.

For years, the developers of data networks worked on their own, talking only among themselves. Now, as companies build their futures around these electronic arteries, ordinary mortals suddenly need to make contact with the people behind them. Here's a glossary to help bridge the divide.

ments such as bills and contracts. Besides saving paper, computers could save time by taking over transactions like regular purchase orders that now require human intervention.

E-MAR: The most common use of networks. Instead of wading through a mountainous "in" basket, the modern executive now must wade through hundreds of pointless electronic-mail messages from subordinates, bosses and salespeople.

ETMENNET: The most common sort of network used in corporations. Its top speed is 10 million bits a second, theoretically enough to deliver two copies of "Moby Dick" every second. Because it works like a party line, if too many people try to send messages at once, the network slows dramatically. (See Token Ring.)

FBO: One of several technologies vying to supercharge today's networks. FDDI, which stands for Fiber Distributed Data Interface, is 10 times faster than Ethernet. Because it's also much more expensive, it's now used mostly for connecting big server computers rather than for linking PCs.

FINER: Fiber optic cable, made of glass fibers instead of copper strands. Data, expressed as pulses of light rather than electrons, is transmitted by lasers or other devices. Optical fiber can carry billions of bits a second, many times more than coaxial or copper wire, and is less sensitive to electrical interference.

FIRE WALL: One way to keep hackers out. Some networking devices can limit access to sensitive parts of a network. For example, a company might authorize access to its salary records only to a computer in a particular location that gives a secret password. But any PC user might be able to send e-mail to the personnel department requesting information.

FORKLIFT UPGRADE: A new network that requires companies to junk their old ones. Derrogatory clang for how wen-

boxes that connect and funnel network wiring. All the wires from a group of PCs in a department typically are strung into one side of a hub, which has wires coming out the other end to link with other departments or larger computers. The most sophisticated hubs come with fancy software that let a manager keep track of all the PCs on a network.

that can't be seen or touched, though it can be talked about ad nauseam. Politicians make it sound like something that you could watch being built, like a road or a pipeline. But building this highway involves not so much stringing fancy wire as upgrading countless networking devices and computers, allowing them to operate at a higher speed and carry heavy traffic such as video files.

INTERMET: One of the most widely misunderstood buzzwords. It's not a network, but rather the interconnection of thousands of separate networks using a common tingo. Developed by the Pentagon, the Internet first linked government agencies and colleges. Now the Net also connects thousands of companies and millions of individuals who subscribe to on-line services; they can use it to exchange messages, data files or—the current hot draw for a lot of people—pornography.

1880: An interim step to take phone companies into the digital age. Integrated Services Digital Network is a technology that lets both voice and data flow over a standard phone line to a home or office. It runs six times faster than most PCs can communicate over a modem, though less than 1/100th the speed of Ethernet.

LAM: Local-area network, a group of computers that are connected by cable and share data, software and storage devices. LANs are needed to practice client-server computing. (See WAN.)

PATEMEN The time was eit around wait.

other central networking functions. The most popular one is NetWare, from Novell Inc.

m. National Information Infrastructure, a synonym for information superhighway. NII is used loosely to mean the technical and public-policy changes needed to make high-speed networking ubiquitous. Really big thinkers talk about GII, for Global Information Infrastructure.

**NOTUSE:** A network that isn't performing as advertised. Companies tend to move slowly to new technologies, fearing they may spend more time as notworks than networks.

PACKET: A chunk of data that is routed to and fro through a network. It includes an address so that it winds up in the right place. (See Token Ring.)

**PEER-18-PEER:** A simple kind of network that sets up a conversation between two machines without a middleman. Both can carry out the same functions. The egalitarian antithesis of client-server.

**PLUG-AND-PRIN**: A network that probably won't work right the first time without divine intervention. The opposite of what vendors aspire to in their ads, which is plug-and-play.

PROTOCOL: As in life, a set of ground rules for behavior. In networking, protocols are standard rules that govern how computers talk together. For example, Ethernet has a way to settle the problem when two people try to send a message at the same time; the system makes them both hang up and try again, waiting a random length of time that is set by their computers.

a traffic cop to direct data traffic among different networks. Unlike bridges, routers have software that understands a wide number of protocols and can make more-complex decisions. For example, a router might choose the cheapest long-distance carrier for sending data between offices in different cities, or select alternative routes if one path is crowded or out of service. Routers are important to Internet's functioning.

SERVER: The machine that talks to clients—more precisely, anything from a PC to a supercomputer that shares files and other services with multiple users.

**SLAR:** Slang for bringing a network to its knees by sending huge data files.

SNEAREMMER. The old-fashioned way.

To move files between computers that aren't connected to electronic networks, PC users store them on floppy disks and walk them from one machine to another.

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**CANNAL CABLE:** Better known as coax, this is the old, fat wire used by cable TV companies and some data networks. It has more capacity than standard copper phone wire, but quite a bit less than fiber-optic lines. (See Fiber.)

common canner. The best example is the phone company. Common carriers are licensed utilities that provide communications services for a fee, under nondiscriminatory terms. Companies usually rely on common carriers to send data between offices in different cities.

otstmosted computing that networks allow. With combinations of PCs and servers, an organization's data and applications software may be scattered among different machines. In the old world, central mainframes hoarded all the goodles.

**OCCURRATION:** Moving a computing function—accounting or inventory management, for example—from a large computer to a smaller machine or network. More bad news for mainframes.

filiated companies can use networks to link their businesses. While electronic mall between companies is common, electronic data interchange passes bigger bundles that replace large paper docu-

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FORGUFT UPGRADE: A new network that requires companies to junk their old ones. Derogatory slang for how vendors have inconvenienced customers.

**CATERIOT:** How to get in. One of the most common usages for the term is an online service company that gives customers access to the Internet. Inside a company, the term usually refers to specialized hardware that connects two different types of systems, such as a mainframe to a local-area network.

constructions: What Al Gore wants us to have. A gigabit network means one that operates at a billion bits a second—100 times Ethernet's speed, and fast enough to make a digitized movie file look as good as in the theater.

RACKER: The reason you have a fire wall. Actually, the politically correct term for computer pranksters these days is "cracker." In some lexicons, hacker is a term of praise for the plucky pioneers who explored networks before there were rules or instruction manuals.

HAMOSHARE: What networking devices do when they first get together. The ritual consists of sending introductory signals back and forth to establish a connection.

NOR: One of the most widely used types of networking hardware, hubs are

wiring. All the wires from a group of PCs in a department typically are strung into one side of a hub, which has wires coming out the other end to link with other departments or larger computers. The most sophisticated hubs come with fancy software that let a manager keep track of all the PCs on a network.

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LANK Local-area network, a group of computers that are connected by cable and share data, software and storage devices. LANs are needed to practice client-server computing. (See WAN.)

LATEMET: The time you sit around waiting for something to happen. On a network, it could be the time it takes for a file or a program to arrive. PC users on a crowded Ethernet network get a vivid demonstration of latency; in a broadcast storm, they might have to wait until the repairman comes.

masion-correct Application: An operation that must not break down, such as a bank's cash-machine network and an airline's computerized reservation system. The test for clientserver computing is to take over mission-critical jobs from mainframes, which were there first and still have an edge in reliability.

NET SUBFINE: What some office workers do when they should be doing something else. The term refers to logging on to the Internet and scanning through discussion groups to pick up information or gossip.

**NETWORK:** A system of computers and other hardware and software that is connected and allows users to transmit data and messages. (See Notwork.)

NETWORK OPERATING SYSTEM: Software that allows a PC or a larger server machine to manage files and handle

divine intervention. The opposite of what vendors aspire to in their ads, which is plug-and-play.

PROTOCOL: As in life, a set of ground rules for behavior. In networking, protocols are standard rules that govern how computers talk together. For example, Ethernet has a way to settle the problem when two people try to send a message at the same time; the system makes them both hang up and try again, waiting a random length of time that is set by their computers.

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SYSTEMS INTEGRATOR: A company that combines hardware and software from various sources into a working system for customers. As networks get more complex, more companies turn to integrators to ease headaches.

TOKEN NAME: The networking scheme most closely associated with International Business Machines Corp. The term comes from a type of data packet, called a token, that is used to keep multiple computers on a network from talking at once. Each user's turn comes as the token passes in turn around the ring of computers on the network.

runsted math The most convenient and inexpensive sort of wiring for networks. It looks similar to the wire that plugs your phone into the wall jack. Though not suitable for handling heavy data traffic over long distances, network-hardware makers keep finding ways to boost the speed of these narrow pipes for sending data around an office.

with A complement to LAN. A wide-area network consists of multiple local networks tied together, typically using telephone-company services. WANs may connect users in different buildings or countries.

MR. CLARK IS A STAFF REPORTER IN THE WALL STREET JOURNAL'S SAN FRANCISCO BUREAU. From ed@cs.unr.edu Thu Apr 28 11:11:53 1994

Date: Thu, 28 Apr PDT 11:14:47 -0700

From: ed@cs.unr.edu (Ed Wishart)

Apparently-To: <smith@ylem.CS.Berkeley.EDU>

In Feb, 1986, Skip Addison of Ungermann-Bass posted some definitions of "bridges", etc which were not the usages I am familiar with. Skip was going to take a poll of the readership of this group as to their definitions. I haven't seen the result yet but perhaps the article got lost before it got to my system. In any case, I found a source which defines the four words in the subject line as I understand them and I'd like to present them here.

The source is "Local Area Networks", by John McNamara, also author of "Technical Aspects of Data Communication". I find both these books to be informative, accurate and just generally among the best books of their kind I am familiar with.

REPEATER A device used at the physical level of the ISO layered model of communications protocols that amplifies or otherwise conditions signals received from one piece of a transmission medium and passes them on to another, similar piece of transmission medium without reading or altering the addresses or the data content. Also called a level 1 relay or a physical level relay.

BRIDGE In contrast to the repeater, which acts upon the bits transferred between the physical layers of the two stations, a bridge acts upon the frames transferred between the data link layers of the two stations. Also called a data link relay or a level 2 relay. [Thus a bridge buffers a whole frame, can compute check sums, and some bridges do routing at the data link or level 2. efw]

ROUTER In a local area network, a device that receives physical-level signaling from a network, performs data-link-level and network-level protocol processes upon those signals, and then sends them via appropriate data-link-level and physical-level protocols onto another network. The transport, session, presentation, and application levels of the information handled remain unchanged. As the name implies, the primary function of a router is to determine how to forward a packet toward its destination, based on tables within the router that indicate the costs, congestion status, and other factors associated with possible routes. Also called a level 3 relay or an intermediate system.

GATEWAY In local area networks, a computer system and its associated software that permit two networks using different protocols to communicate with each other. A gateway translates all protocol levels from physical layer up through applications layer, and can thus be used to interconnect networks that differ in every detail.

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#### PC Tech/Tutor

By Jeff Prosise

## **Internet Acronyms**

### Catch up on the jargon being used by Internet gurus.

onfused by the latest spate of Internetrelated acronyms flooding the computer industry? You're not alone. There are so many unexplained acronyms that understanding them is like trying to communicate in a foreign country when you don't know the language and have forgotten your translator.

To help you feel more at home, here is a concise explanation of some common Internet acronyms from ADSL to WWW. Don't be caught off guard the next time an Internet guru throws the latest jargon at you. Instead, be prepared. Learn the language ahead of time so you don't feel out of place when terms such as ICMP and PPTP are being thrown around.

ADSL (Asymmetric Digital Subscriber Line) A digital phone-line technology that supports high-speed connections to the Internet using ordinary copper telephone wires. Proffered by AT&T as an ISDN replacement for Web surfers, ADSL is "asymmetric" because uplink speeds (64 Kbps) differ markedly from downlink speeds (up to 6 Mbps). ADSL is currently available only in selected markets.

ARP (Address Resolution Protocol) The protocol that translates Internet Protocol, or IP, addresses (for example, 128.10.3.42) into physical network addresses. One of the many members of the TCP/IP protocol suite, ARP is a key player in the process that allows a packet of data addressed to a particular Internet host to find its destination. See also DNS, RARP and TCP/IP.

CGI (Common Gateway Interface) A means for transferring information that users have typed into forms found on Web pages to scripts or programs run on a Web server, and vice versa. I wo of the most common uses for CGI are performing database queries in response to user input and creating dynamic Web pages by assembling HTML data on the fly. The most popular language for writing CGI programs is Perl.

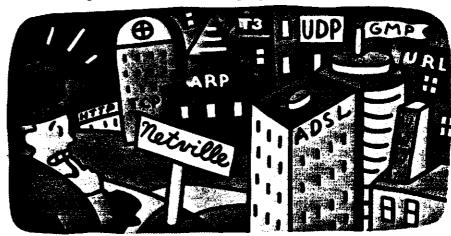
DNS (Domain Name Service) The online database that correlates Internet IP addresses (for example, 128.10.3.42) to human-readable domain names such as pcmag.com. The database isn't stored on any one computer; rather, it's distributed among thousands of name servers spread throughout the Internet.

FAQ (Frequently Asked Questions) A document with answers to—you guessed it—frequently asked questions. FAQs are widely available online and cover a broad spectrum of topics ranging from gourmet cooking to the inner workings of TCP/IP.

FTP (File Transfer Protocol) A widely used TCP/IP protocol for transferring files from one machine to another. Internet users may use FTP applications to log in to FTP servers and download files. No restrictions are placed on file contents; they may contain text or binary data. Files may be protected from unauthorized access using authentication control, or

ICMP (Internet Control Message Protocol) The TCP/IP protocol used to send control and error information regarding IP datagram transmissions. When an IP datagram cannot be delivered to its destination, perhaps because the machine at the destination is temporarily out of service or message traffic is too heavy, a router may use ICMP to notify the sender of the failure. See also IP.

IGMP (Internet Group Management Protocol)
The TCP/IP protocol that permits Internet
hosts to take part in IP multicasting—an efficient means of broadcasting messages to
groups of computers.



they can be made public with anonymous FTP, which doesn't require a login name or password. See also TFTP.

HTML (Hypertext Markup Language) A textbased page description language that uses tags to describe formatting idioms and allows richly formatted documents to be created using everyday text editors. HTML is the language used to create Web pages. See also HTTP and VRML.

HTTP (Hypertext Transfer Protocol) The textbased protocol that serves as the official language of the World Wide Web. HTTP defines high-level commands, or methods—such as GET and PUT—that browsers use to communicate with Web servers. The GET command requests a page of HTML data, a. GIF file, or other resource from a Web server in preparation for displaying it in a browser window. See also HTML. InterNiC (Internet Network Information Center)
The administrative organization that is responsible for, among other things, allocating domain names and distributing RFCs. Funded by the National Science Foundation (NSF), the InterNiC is currently run by Network Solutions and AT&T. See also RFC.

IP (Internet Protocol) The protocol responsible for transmitting packets of data over the Internet and routing them to their destinations. Tagging a packet with an IP address identifying an Internet host and transmitting it using IP is analogous to addressing an envelope and dropping it in the mail. IP plays the role of post office, allowing the networks and routers involved in the delivery process to talk to each other as the packet finds its way to the addressee. See also TCP, TCP/IP, and UDP.

ISDN (Integrated Services Digital Network) A digital telephone network that transmits data

in digital form (1's and 0's) rather than analog form. Provided it's available in your area, ISDN is a quick and convenient way to access the Internet from your home or small office at speeds of up to 128 Kbps.

ISP (Internet Service Provider) A company, usually a local one, that provides connections to the Internet for a monthly or hourly fee.

MIME (Multipurpose Internet Mail Extensions)
A protocol for sending non-ASCII data—for example, sound, video, and graphics—over the Internet using text-based transport protocols such as SMTP. See also POP and SMTP.

NNTP (Network News Transfer Protocol) The protocol used to transmit Usenet messages across the Internet.

PING (Packet Internet Groper) A TCP/IP application used to determine whether other machines are online and available. Pinging is performed by sending an ICMP echo request and waiting for a reply. See also ICMP.

POP (Post Office Protocol) The text-based protocol used to send and retrieve Internet e-mail messages. Unlike SMTP, which is used primarily to transfer mail messages between mail servers, POP provides a way for mail programs to interact with the virtual mailboxes in which messages wait until they are sent or retrieved. POP comes in two flavors: POP2 and POP3. The two are related in name only and are not compatible. See also SMTP.

most popular protocol for establishing dial-up connections to the Internet.

PPP is similar to but more robust than SLIP, which lacks support for data compression, error detection, and multiple protocols on a single line. PPP resolves all these deficiencies and more. See also PPTP and SLIP.

PPTP (Point-to-Point Tunneling Protocol) An enhanced form of PPP that uses "tunneling"—encapsulating packets of data written for one network protocol inside packets used by another—to allow TCP/IP data to be transmitted over non-TCP/IP networks. The most common use for PPTP is to join physical networks together to form "virtual internets" using the Internet as a go-between. See also PPP.

RARP (Reverse Address Resolution Protocol)
The Internet protocol that permits a physical
network address (for example, a 48-bit Ethernet address) to be translated into an IP address by sending a request to an RARP server.
This protocol is used by diskless workstations
to determine their own IP addresses at startup. See also ARP.

RFC (Request for Comments) An online document containing proposals, standards, and other information regarding Internet technologies. RFCs are available by anonymous FTP from a variety of locations, including InterNIC's own ds.internic.net. They may also be requested by e-mail (mailserv@ds.internic .com) or by phone (800-444-4345).

SLIP (Serial Line Internet Protocol) A widely used but somewhat outdated protocol for establishing dial-up connections to the Internet. Technically speaking, SLIP is a packet-framing protocol that defines how IP datagrams (packets of data transmitted over the Internet using IP) are packaged for transmission over serial data lines—for example, over a serial link between your modem and an Internet service provider. See also IP, PPP, and PPTP.

SMTP (Simple Mail Transfer Protocol) The text-based TCP/IP protocol used to exchange mail messages on the Internet. A simplified version of the earlier MTP (Mail Transport Protocol), SMTP defines the format and content of transactions between mail servers. See also MIME and POP.



T1 A leased line that provides high-speed 1.544-Mbps (megabit per second) connections to the Internet. Typically available in large-company and university settings. Also known as "Web Surfer's Heaven."

T3 A leased line that provides ultra-highspeed 45-Mbps connections to the Internet.

TCP (Transmission Control Protocol) The TCP/IP protocol that provides reliable stream delivery service to Internet applications. Using TCP, an Internet client can open a virtual connection to another Internet client and transmit streams of data. Unlike its counterpart, UDP, the TCP protocol ensures reliable delivery by retransmitting lost and corrupted data packets. It also guarantees that an application on the receiving end of a TCP connection will receive bits and bytes in the same order in which they were sent. See also UDP.

TCP/IP (Transmission Control Protocol/Internet Protocol) A suite of networking protocols that includes TCP, IP, UDP, ARP, RARP, and ICMP, to name just a few. Often referred to as the "the glue that binds the Internet," TCP/IP allows disjoint, dissimilar, and spatially separated physical networks to be joined together to form one large virtual network, or "internet." For more detailed discussion of TCP/IP, see the Tutor column "A Beginner's Guide to TCP/IP" in the November 19, 1996, issue of PC Magazine.

TFTP (Trivial File Transfer Protocol) A simplified version of FTP that lacks the authentication services FTP provides and relies on UDF rather than TCP for data transport. TFTP is less complex and easier to program than FTP. See also FTP.

UDP (User Datagram Protocol) The TCP/IP protocol that allows packets of data, or datagrams, to be sent from one Internet application to another. UDP is a "connectionless" protocol, because, unlike TCP, it does not require the sender and receiver to establish

a connection before data is transmitted. It's considered "unreliable," because it doesn't guarantee that datagrams will arrive in the same order they were sent, or even that they will arrive at all. If reliability is desired, it's up to the application using UDP to provide it. See also TCP.

URL (Uniform Resource Locator) A human-readable string that identifies the location of a resource on the Internet (for example, a page of HTML data or a .GIF file) and the protocol used to retrieve it. The URL for a document published by the World Wide Web Consortium that describes the format of URLs is http://www.w3.org/pub/WWW/Addressing/Addressing.html.

VRML (Virtual Reality Modeling Language)
The 3-D counterpart to HTML, VRML is a scriptlike language that permits rich 3-D scenes to be described in simple text files and displayed in VRML-capable Web browsers.
VRML solves the problem of the high bandwidth required to transmit bitmapped scenes by minimizing the flow of information from the Web server to the browser and allowing the browser to render the scene—and thus do the bulk of the work required to display the scene—locally. See also HTML.

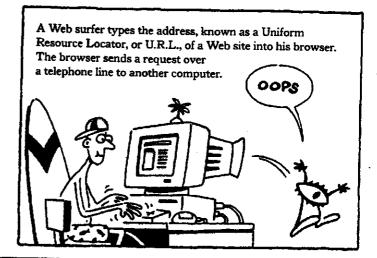
WWW (World Wide Web) A virtual world formed by Internet HTTP servers containing richly formatted pages that can be downloaded upon request to browsers such as Netscape Navigator and Microsoft Internet Explorer. It is more commonly known as "the Web." It was the creation of this network in 1994 (and the proliferation of browsers that followed soon after) that made Internet a household word. See also HTML, HTTP, and VRML. \(\sigma\)

Jeff Prosise is a contributing editor of PC Magazine.

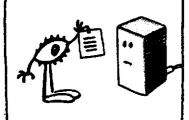
**FUNDAMENTALS** 

### Browser Software Brings the Web Home

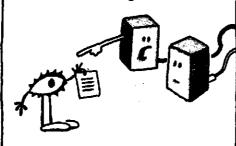
For computer users devoted to the World Wide Web, their browser — Netscape or Microsoft Explorer, for instance — may seem magical, a quick route through mysterious cyberspace to Web sites around the world. Or the browser may be an annoyance at times, clunky and slow, providing frustration instead of instant gratification. But few users have any idea how a browser works. Even though the user seems to be transported to distant locations, the home pages flow into the user's computer. Here is a look at how it really works.



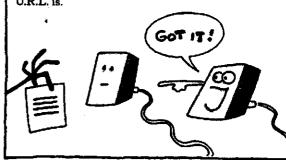
That computer, called a local domain name server, looks at the U.R.L.



If it does not recognize the U.R.L. address, it asks another, more powerful, domain server if it recognizes the U.R.L.



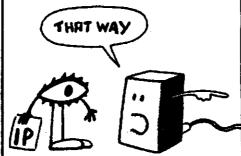
Usually that computer can tell the first domain name server what the U.R.L. is.



The server translates the U.R.L. address into a numeric code known as Internet Protocol, creating an I.P. address.



Then the server directs the request to a site on another computer that corresponds with the I.P. address.



When the request arrives, it can be blocked by a firewall, a program that acts like a guard.



But usually the Web site responds with instructions for how to assemble the requested page for the user's computer.

The site records information about the request, including the I.P. address, the type of computer and the type of browser, making a record of who visits the page.

### The Macmillan Information SuperLibrary JANUARY TOP TEN LIST

Top Ten Signs You are an Internet Geek

- 10. When filling out your driver's license application you give your IP address.
- 9. You no longer ask prospective dates what their sign is, instead your line is "Hi, what's your URL?"
- 8. Instead of calling you to dinner, your spouse sends email.
- 7. You're amazed to find out spam is a food.
- 6. You "ping" people to see if they're awake, "finger" them to find out how they are, and "AYT" them to make sure they're listening to you.
- 5. You search the Net endlessly hoping to win every silly free T-shirt contest.
- 4. You introduce your wife as "my lady@home.wife" and refer to your children as "client applications".
- 3. At social functions you introduce your husband as "my domain server".
- 2. After winning the office super bowl pool you blurt out, "I feel so "colon-right parentheses!"
- ... And the number one sign you are an Internet Geek:
- 1. Two Words: "Pizza's Here!".