

access point (AP)	A device that connects to a wireless router and is used to extend the reach of a wireless network.
Address Resolution Protocol (ARP)	An internet protocol used to map an IP address to a MAC address. Defined in RFC 826.
American National Standards Institute (ANSI)	A private nonprofit organization that oversees development of standards in the United States.
American Standard Code for Information Interchange (ASCII)	An 8-bit code (7 bits plus parity) for character representation.
automatic medium-dependent interface crossover (auto-MDIX)	A feature on a switch port that detects the type of cable used between switches or hubs.
Bootstrap Protocol (BOOTP)	A protocol used by a network node to determine the IP address of its Ethernet interfaces in order to facilitate network booting.
bring your own device (BYOD)	A policy that allows end users to use personal tools to access information and communicate across a business or campus network.
burned-in address (BIA)	The MAC address that is permanently assigned to a LAN interface or NIC.
Carrier Sense Multiple Access (CSMA)	A media-access mechanism in which devices ready to transmit data first check the channel for a carrier.
Carrier Sense Multiple Access/Collision Avoidance (CSMA/CA)	A media-access mechanism that regulates the transmission of data onto a network medium. CSMA/CA is similar to CSMA/CD except that devices first request the right to send, in order to avoid collisions. CSMA/CA is used in 802.11 WLANs.
content addressable memory (CAM) table	Memory that is accessed based on its contents rather than on its memory address. Also known as associative memory.
cyclic redundancy check (CRC)	A type of hash function (one-way encryption) that is used to produce a small, fixed-size checksum of a block of data, such as a packet or a computer file.
denial of service (DoS)	An attack that consumes system resources in order to prevent authorized people from using a service.
Asymmetrical Digital Subscriber Line (ADSL)	Office and home office users connect using Asymmetrical DSL (ADSL), which means that the download speed is faster than the upload speed.
Domain Name System (DNS)	DNS servers refer users to the correct DNS server to successfully resolve a DNS name.
Dynamic Host Configuration Protocol (DHCP)	A protocol used to dynamically assign IP configurations to hosts.
electromagnetic interference (EMI)	Interference by magnetic signals caused by the flow of electricity.
EUI-64 (Extended Unique Identifier-64)	A process for creating an IPv6 interface ID by using the 48-bit Ethernet MAC address, inserting fffe in the middle, and flipping the seventh bit.
File Transfer Protocol (FTP)	Used for transferring files between network nodes. FTP is defined in RFC 959.
global unicast address (GUA)	An IPv6 address similar to a public IPv4 address. It is a globally unique, internet-routable address.
Institute of Electrical and Electronics Engineers (IEEE)	An international, nonprofit organization for the advancement of technology related to electricity.
Internet Assigned Numbers Authority (IANA)	An organization that assigns the numbers important to the proper operation of TCP/IP and the internet, including assigning globally unique IP addresses.
Internet Control Message Protocol (ICMP)	Used to inform how well an internetwork is working. For example, the ping command sends ICMP messages to determine whether a host can send packets to another host.
Internet Message Access Protocol (IMAP)	A protocol that describes a method to retrieve email messages. Copies of the messages are downloaded to the client application, but the original messages are kept on the server until manually deleted.
internet service provider (ISP)	A company that provides internet connectivity to enterprises and individuals.
intrusion detection system (IDS)	A system that passively monitors traffic on a network.
local-area network (LAN)	A network infrastructure that provides access to users and end devices in a small geographic area.
Logical Link Control (LLC)	The IEEE 802.2 standard that defines the upper sublayer of the Ethernet Layer 2 specifications and other LAN standards.
maximum transmission unit (MTU)	The largest IP packet size allowed to be sent out a particular interface.

<b>metropolitan-area network (MAN)</b>	<b>A network that spans a large campus or a city.</b>
<b>multimode fiber (MMF)</b>	<b>Optical fiber that consists of a larger core and uses LED emitters to send light pulses.</b>
<b>Neighbor Discovery (ND)</b>	<b>A protocol that provides address resolution, router discovery, and redirection services for IPv6 using ICMPv6.</b>
<b>Network Address Translation (NAT)</b>	<b>A technique used to translate IP addresses to different addresses.</b>
<b>network interface card (NIC)</b>	<b>Computer hardware that allows a computer to connect to some networking cable.</b>
<b>nonvolatile RAM (NVRAM)</b>	<b>RAM that does not lose its contents when the device is powered off.</b>
<b>organizationally unique identifier (OUI)</b>	<b>The first half of a MAC address.</b>
<b>peer-to-peer (P2P)</b>	<b>A small network where a host can play the role of a client and/or a server.</b>
<b>personal-area network (PAN)</b>	<b>A network that connects devices within the range of an individual person.</b>
<b>Post Office Protocol (POP)</b>	<b>A protocol that allows a computer to retrieve email from a server.</b>
<b>power over Ethernet (PoE)</b>	<b>The powering of network devices over Ethernet cable.</b>
<b>power-on self-test (POST)</b>	<b>The hardware check that the basic input/output system (BIOS) performs on the main components of a computer at boot.</b>
<b>quality of service (QoS)</b>	<b>A control mechanism that can provide different priorities to different users or data flows.</b>
<b>Request for Comments (RFC)</b>	<b>A series of documents developed by the IETF for the TCP/IP protocol suite.</b>
<b>Router Advertisement (RA) message</b>	<b>An ICMPv6 message sent by a router to provide addressing information to hosts using SLAAC.</b>
<b>Secure Shell (SSH)</b>	<b>A protocol that provides a secure remote connection to a host through a TCP application.</b>
<b>Server Message Block (SMB)</b>	<b>An application level protocol mainly applied to shared access to files, printers, and serial ports.</b>
<b>shielded twisted-pair (STP) cable</b>	<b>A network cabling that includes twisted-pair wires, with shielding around each pair of wires, as well as another shield around all wires in the cable.</b>
<b>Simple Mail Transfer Protocol (SMTP)</b>	<b>An application layer protocol that provides electronic mail services to transfer mail from client to server and between servers.</b>
<b>small office/home office (SOHO) network</b>	<b>A network in which computers can connect to a corporate network or access centralized, shared resources.</b>
<b>SNMP (Simple Network Management Protocol)</b>	<b>A protocol that enables network administrators to monitor network operations from centralized monitoring stations.</b>
<b>stateless address autoconfiguration (SLAAC)</b>	<b>A plug-and-play IPv6 feature that enables devices to connect themselves to the network without any configuration.</b>
<b>Time-to-Live (TTL)</b>	<b>A field in the IP header that prevents a packet from indefinitely looping around an IP internetwork.</b>
<b>Trivial File Transfer Protocol (TFTP)</b>	<b>A protocol similar to FTP supported by UDP, whereas FTP is supported by TCP.</b>
<b>unshielded twisted-pair (UTP) cable</b>	<b>A general type of cable, with twisted pairs of copper wires.</b>
<b>User Datagram Protocol (UDP)</b>	<b>A connectionless transport layer protocol.</b>
<b>variable-length subnet masking (VLSM)</b>	<b>A process to specify a different subnet mask for the same network number on different subnets and can optimize available address space.</b>
<b>virtual local-area network (VLAN)</b>	<b>VLANs are configured through software on the switch and router.</b>
<b>wide-area network (WAN)</b>	<b>A network infrastructure over a wide geographic area owned and managed by a telecommunications service provider.</b>
<b>wireless access point (WAP)</b>	<b>A wireless AP uses radio waves to communicate with the wireless NICs in the devices and other wireless access points.</b>