z/OS Communications Server

Glossary

Version 2 Release 1

Glossary

This glossary provides terms and definitions for the z/OS Communications Server software and products.

For other terms and definitions, see the IBM Terminology website.

Numerics

31-bit storage addressing
An addressing structure introduced with the MVS/XA operating system that supports addressing up to 2 GB of real and virtual memory, in addition to the prior support for 24-bit addressing. The architecture has since been extended with 64-bit addressing.

3270 data stream
The commands, control codes, orders, attributes, and data or structured fields for 3270 devices, that are transmitted inbound to an application program or outbound to a terminal.

A

AAL See ATM adaptation layer.

AARP See AppleTalk Address Resolution Protocol.

abend See abnormal end of task.

abend dump
A dump that is produced when a program ends abnormally.

ABM

1. See activity based management.
2. See asynchronous balanced mode.

abnormal end of task (abend)
The termination of a task, job, or subsystem because of an error condition that recovery facilities cannot resolve during execution.

abnormal termination
A system failure or operator action that causes a job to end unsuccessfully.

ABR See area border router.

abstract syntax
A data specification that includes all distinctions that are needed in data transmissions, but that omits (abstracts) other details such as those that depend on specific computer architectures. See also Abstract Syntax Notation One, Basic Encoding Rules.

Abstract Syntax Notation One (ASN.1)

1. The international standard for defining the syntax of information data. It defines a number of simple data types and specifies a notation for referencing these types and for specifying values of these types. The ASN.1 notations can be applied whenever it is necessary to define the

abstract syntax of information without constraining in any way how the information is encoded for transmission. See also Basic Encoding Rules.

2. In open systems interconnection (OSI), a notation for defining data structures and data types. The notation is defined in international standards ISO 8824/ITU X.208 and ISO 8825/ITU X.209. See also abstract syntax.

ACB

1. See application control block.
2. See adapter control block.
3. See access method control block.

ACB address space
In VTAM, the address space in which the access method control block (ACB) is opened. See also associated address space, session address space.

ACB-based macroinstruction
In VTAM, a macroinstruction whose parameters are specified by the user in an access method control block.

ACB macroinstruction
See ACB-based macroinstruction.

ACB name
A name that is specified either on the VTAM APPL definition statement or on the VTAM application program's access method control block (ACB) macroinstruction. See also network name.

accelerator
In a user interface, a key or combination of keys that invokes an application-defined function.

accept An action in which a listener receives a connection request.

access The ability to read, update, or otherwise use a resource. Access to protected resources is usually controlled by system software.

access barred
In data communication, a condition in which a data terminal equipment (DTE) cannot call the DTE identified by the selection signals.

access control
In computer security, the process of ensuring that users can access only those resources of a computer system for which they are authorized.

access control list (ACL)
In computer security, a list associated with an object that identifies all the subjects that can access the object and their access rights.

access method
A technique for moving data between main storage and input/output devices.

access method control block (ACB)
A control block that links an application program to Virtual Storage Access Method (VSAM) or Virtual Telecommunications Access Method (VTAM).

access method services (AMS)
A multifunction utility named IDCAMS that is used to manage catalogs, devices, and both VSAM and non-VSAM data sets.

access procedure
The protocol used to gain access to a shared resource; for example, in a local area network, the shared resource is the transmission medium. The medium access protocol specified by the IEEE 802 standard are CSMA/CD token bus and token ring.

access register (AR)
A register through which one address space accesses the data in another address space or data space.

access register mode (AR mode)
The address space control mode in which the system uses general-purpose registers and the corresponding access register (AR) to resolve an address in an address space or a data space. See also address space control mode.

access unit
A unit that allows attaching devices to access a local area network (LAN) at a central point, such as a wiring closet or an open work area.

ACDI See Asynchronous Communications Device Interface.

ACF See Advanced Communications Function.

ACF/NCP
See Advanced Communications Function for the Network Control Program.

ACF/SSP
See Advanced Communications Function for the System Support Programs.

ACF/TAP
See Advanced Communications Function/Trace Analysis Program.

ACF/TCAM
See Advanced Communications Function for the Telecommunications Access Method.

ACF/VTAM
See Advanced Communications Function for Virtual Telecommunications Access Method.

ACK See acknowledgment.

acknowledgment (ACK)
The transmission of acknowledgment characters as a positive response to a data transmission.

ACL See access control list.

ACO See automated console operation.

acquire

1. In VTAM, to take over resources that were formerly controlled by an access method in another domain or to resume control of resources that were controlled by that domain but released. See also release, resource takeover.
2. In a VTAM application program, to initiate and establish a session with another logical unit (LU). The acquire process begins when the application program issues a macroinstruction. See also accept.

action A defined task that an application performs on an object as a result of an event. See also rule.

ActionMedia II (IBM PS/2 ActionMedia II)
An IBM MultiMedia solution that uses Digital Video Interactive (DVI) technology. Capture and playback adapters provide digital video and audio.

activate
To make a resource ready to perform its function. See also deactivate.

activate link
In SNA, a command used to initiate link activation.

activate logical unit (ACTLU)
In SNA, a command used to activate a logical unit.

activate physical unit (ACTPU)
In SNA, a command used to activate a physical unit.

active

1. In VTAM, pertaining to a major or minor node that has been activated by VTAM. Most resources are activated as part of VTAM start processing or as the result of a VARY ACT command. See also pending active session.
2. Pertaining to a node or device that is connected or is available for connection to another node or device.
3. Pertaining to a resource that is currently operational. See also inoperative.
4. Pertaining to a file, page, or program that is in main storage or memory, as opposed to a file, page, or program that must be retrieved from auxiliary storage.

active application
The application subsystem that is currently in an extended recovery facility (XRF) session with a terminal user. See also alternate application.

active gateway
A gateway that is treated like a network interface in that it is expected to exchange routing information. If it does not do so for a period of time, the route associated with the gateway is deleted.

active link
A link that is currently available for transmission of data.

active monitor
In a token-ring network, a function performed at any one time by one ring station that initiates the transmission of tokens and provides token error recovery facilities. Any active adapter on the ring has the ability to provide the active monitor function if the current active monitor fails.

active open
In TCP/IP, the state of a connection that is actively providing a service. See also passive open.

active program
Any program that is loaded and ready to be executed.

active window
The window with which a user is currently interacting. This is the window that receives keyboard input. It is distinguishable by the unique color of its title bar and border.

activity based management (ABM)
A method for managing activities to increase both their value to customers and company profit.

ACTLU
See activate logical unit.

ACTPU
See activate physical unit.

ACU See automatic calling unit.

adapter
A mechanism for connecting two unlike parts or machines, or for electrically or physically connecting a device to a computer or to another device.

adapter control block (ACB)
In NCP, a control block that contains line control information and the states of I/O operations for BSC lines, SS lines, or SDLC links.

adaptive compression
Data row compression that encompasses classic row compression and the compression that is provided by automatically maintained page-level dictionaries.

adaptive pacing
See adaptive session-level pacing.

adaptive rate-based congestion control (ARB congestion control)
An exchange of information between connection endpoints that is used to estimate congestion as part of the ARB algorithm.

adaptive session-level pacing
A form of session-level pacing in which session components exchange pacing windows that may vary in size during the course of a session. This allows transmission within a network to adapt dynamically to variations in availability and demand of buffers on a session-by-session basis. Session-level pacing occurs within independent stages along the session path according to local congestion at the intermediate and endpoint nodes. See also fixed session-level pacing, session-level pacing.

adaptive session pacing
See adaptive session-level pacing.

address
A unique code or identifier for a register, device, workstation, system, or storage location.

address aliasing
See network address translation.

address class
In Internet communications, the categorization by the part of an IP address that distinguishes the network address from the host address. Class A addresses allocate 7 bits to the network ID and 24 bits to the host ID. Class B addresses allocate 14 bits to the network ID and 16 bits to the host ID. Class C addresses allocate 21 bits to the network ID and 8 bits to the host ID. Class D addresses contain 1110 in the first 4 bits and identify the address as a multicast. The remaining 28 bits in the class D address specify a particular multicast group.

addressing

1. A method of identification in which the sending or control station selects the station to which it is sending data.
2. The assignment of addresses to the instructions of a program.

address-mapper function
In MPTN architecture, a component that maps nonnative transport-user addresses to a form used in the native transport network.

address mapping table (AMT)
A table that provides a current mapping of node addresses to hardware addresses.

address mask
For internet subnetworking, a 32-bit mask used to identify the subnetwork address bits in the host portion of an IP address. See also subnet mask, subnetwork mask.

address resolution
A method for mapping network-layer addresses to media-specific addresses. See also Address Resolution Protocol, Reverse Address Resolution Protocol.

Address Resolution Protocol (ARP)
A protocol that dynamically maps an IP address to a network adapter address in a local area network. See also address resolution, gratuitous ARP, Reverse Address Resolution Protocol.

address space
The range of addresses available to a computer program or process. Address space can refer to physical storage, virtual storage, or both. See also buffer pool.

address space control mode
The mode, determined by the program status word, that indicates where to find referenced data. Three types of address space control modes are primary, secondary, and access register. VTAM macroinstructions must be invoked in primary address space control mode. See also access register mode.

address space identifier (ASID)
A unique, system-assigned identifier for an address space.

address space manager (ASM)
A component in an APPN or LEN node that assigns and frees session addresses.

address translation
See network address translation.

address type
In data communications, a value used to define the format and contents of an address field. Address types are associated with the originator address, the recipient address, and the reply-to address information. The address types supported by a system are defined when the mail server framework is configured. The value associated with an address type must be unique.

adjacent control point
A control point (CP) that is directly connected to an APPN, LEN, or composite node by a link.

adjacent domain
A domain that is physically connected to another domain by a single cross-domain link or by a shared local communication controller.

adjacent link station (ALS)
In SNA, a link station directly connected to a given node by a link connection over which network traffic can be carried. Several secondary link stations that share a link connection do not exchange data with each other and therefore are not adjacent to each other. See also link station.

adjacent NCP
A network control program (NCP) that is connected to another NCP by subarea links with no intervening NCPs.

adjacent network
An SNA network that is joined to another SNA network by a common gateway NCP.

adjacent node
In OSI, a node that is attached to the same subnetwork as the local node. An adjacent node can be either a destination node or a relay node.

adjacent SSCP table (ADJSSCP)
A table that contains lists of the system services control points (SSCPs) that VTAM can be in session with or can use to reach destination SSCPs in the same network or in other networks. The table is filed in the VTAM definition library.

adjacent subarea
In an SNA network, a subarea that is connected to another subarea by one or more links, with no intervening subareas. See also subarea.

ADJSSCP
See adjacent SSCP table.

administrative domain
A collection of hosts and routers, and the interconnecting networks, that are managed by a single administrative authority.

administrative repository
A database that contains configuration, problem, change, and inventory information needed to administer the information system. The repository can be used to perform the functions of configuration management, problem management, and change management.

administrator collection
In a Tivoli environment, a resource that contains all Administrator objects. The Administrator icon on the Tivoli desktop represents an administrator collection.

Advanced Communications Function (ACF)
A group of IBM licensed programs that use the concepts of Systems Network Architecture (SNA), including distribution of function and resource sharing.

Advanced Communications Function for the Network Control Program (ACF/NCP)
See Network Control Program.

Advanced Communications Function for the System Support Programs (ACF/SSP)
See System Support Program.

Advanced Communications Function for the Telecommunications Access Method (ACF/TCAM)
See Telecommunications Access Method.

Advanced Communications Function for Virtual Telecommunications Access Method (ACF/VTAM)
An IBM licensed program that controls communication and the flow of data in an SNA network. It provides single-domain, multiple-domain, and interconnected network capability.

Advanced Communications Function/Trace Analysis Program (ACF/TAP)
An SSP program service aid that assists in analyzing trace data produced by VTAM, TCAM, and NCP and provides network data traffic and network error reports. See also Advanced Communications Function/Trace Analysis Program.

advanced function printing (AFP)
The ability of programs to use the all-points-addressable concept to print text and images on a printer. AFP supports Advanced function printing data stream (AFPDS), Intelligent printer data stream (IPDS) and SNA character string (SCS).

Advanced Peer-to-Peer Networking (APPN)
An extension to SNA that features distributed network control, dynamic definition of network resources, automated resource registration, and automated directory lookup. This network architecture supports the routing of data in a network between two or more Advanced Peer-to-Peer Communication (APPC) systems that do not need to be directly connected. See also network node.

Advanced Program-to-Program Communication (APPC)
An implementation of the SNA LU 6.2 protocol that allows interconnected systems to communicate and share the processing of programs.

Advanced Research Projects Agency (ARPA)
See Defense Advanced Research Projects Agency.

AE See application entity.

AEP See AppleTalk Echo Protocol.

AFP See advanced function printing.

agent An entity that represents one or more managed objects by sending notifications regarding the objects and by handling requests from servers for management operations to modify or query the objects.

agent role
In systems management, a role assumed by a user in which the user is capable of performing management operations on managed objects and of emitting notifications on behalf of managed objects.

aggregate
A structured collection of data objects that form a data type.

aggregate object
Any object that contains child objects. Because an aggregate object is not monitored directly, it does not receive events directly. Rather, it receives only the events that are propagated by its children. See also real object.

aggregate resource
In the NetView Graphic Monitor Facility, an object that represents a collection of real resources.

AID See attention identifier.

AIW See APPN Implementors Workshop.

AIX operating system
IBM's implementation of the UNIX operating system. The RISC System/6000 system, among others, runs the AIX operating system.

AIXwindows Toolkit
An object-oriented collection of C language data structures and subroutines that supplement the Enhanced X-Windows Toolkit and simplify the creation of interactive client-application interfaces. See also Enhanced X-Windows Toolkit.

alarm An audible or visual signal at a device, such as a display station or printer, that is used to notify the user that a predefined condition exists.

alarm level
See response level.

alert

1. An informational event that requires user action. See also event.
2. A message or other indication that signals an event or an impending event that meets a set of specified criteria. See also rule.
3. A notice that describes replication events and conditions. The Replication Alert Monitor sends alerts to an email address or to a pager.

alert condition
A problem or impending problem for which information is collected and possibly forwarded for problem determination, diagnosis, or resolution.

alert focal point
The system in a network that receives and processes (logs, displays, and optionally forwards) alerts. An alert focal point is a subset of a problem management focal point.

alert ID number
A value created from specific fields in the alert using a cyclic redundancy check. A focal point uses this value to refer to a particular alert, for example, to filter out duplicate alerts.

alert type
An alert that indicates the severity or the type of the problem being reported.

alias An alternative name used instead of a primary name.

alias address
An alternative address for a network interface that can be used in place of the real address. See also network address translation.

alias name
A name that is used to represent all or part of a command. See also name translation.

alias name translation facility
A function for converting logical unit names, logon mode table names, and class-of-service names used in one network into equivalent names used in another network.

allocate
To assign a resource to a specific task.

allomorphism
The ability of an instance of a class to be managed as an instance of one or more different but compatible managed object classes.

all-points addressable (APA)
Able to address, reference, and position text, overlays, and images at any defined position or picture element (pel) on the printable area of the paper. This capability depends on the ability of the hardware to address and to display each picture element.

all-stations address
See broadcast address.

already-verified indicator
An indicator that is in the attach function management header. The indicator means that the ID-password confirmation has already been verified. Therefore the conversation request is sent with a user ID but without a password.

ALS See adjacent link station.

alternate application
The subsystem that is prepared to take over a particular active application's extended recovery facility (XRF) sessions with terminal users in case the application fails. See also active application.

alternate path
A channel that an operation can use after a failure. See also primary path.

alternate path retry (APR)
A facility that allows a failed I/O operation to be retried on another channel assigned to the device performing the I/O operation. It also provides the capability to establish other paths to an online or offline device.

alternate route
A secondary or backup route that is used if normal routing is not possible.

AMA See arbitrary MAC addressing.

American National Standards Institute (ANSI)
A private, nonprofit organization whose membership includes private companies, U.S. government agencies, and professional, technical, trade, labor, and consumer organizations. ANSI coordinates the development of voluntary consensus standards in the U.S.

American Standard Code for Information Interchange (ASCII)
A standard code used for information exchange among data processing systems, data communication systems, and associated equipment. ASCII uses a coded character set consisting of 7-bit coded characters. See also Extended Binary Coded Decimal Interchange Code.

AMS

1. See Application Management Specification.
2. See access method services.

AMT See address mapping table.

analog
Pertaining to data that consists of continuously variable physical quantities. See also digital.

ancillary equipment
See auxiliary equipment.

AND operation
See conjunction.

anonymous user
A user who does not use a valid user ID and password to log in to a site.

ANR See automatic network routing.

ANSI See American National Standards Institute.

any-mode
The form of an accept request that completes the establishment of a session by accepting any unspecified queued CINIT request. See also continue-any mode.

AnyNet product family
A group of IBM products that implement the multiprotocol transport networking (MPTN) architecture, thus enabling application programs to communicate independently of the underlying network transport protocol.

AO See Automated Operator.

AP See application program.

APA See all-points addressable.

APAR See authorized program analysis report.

API See application programming interface.

APPC See Advanced Program-to-Program Communication.

appendage
An application program routine provided to assist in handling a specific occurrence.

AppleTalk
A network protocol developed by Apple Computer, Inc. This protocol is used to interconnect network devices, which can be a mixture of Apple and non-Apple products.

AppleTalk Address Resolution Protocol (AARP)
In AppleTalk networks, a protocol that (a) translates AppleTalk node addresses into hardware addresses and (b) reconciles addressing discrepancies in networks that support more than one set of protocols.

AppleTalk Echo Protocol (AEP)
In AppleTalk networks, a protocol that provides a node destination test function by means of a send and receive transaction where the packet received at the source node is identical to the packet sent to the destination node.

AppleTalk Transaction Protocol (ATP)
In AppleTalk networks, a protocol that provides client/server request and response functions for hosts accessing the Zone Information Protocol (ZIP) for zone information.

application
One or more computer programs or software components that provide a function in direct support of a specific business process or processes.

application control block (ACB)
A control block that is created from the output of DBD and PSB generation and placed in the ACB library for use during online and database batch (DBB) region type execution of IMS.

application entity (AE)
1. In Open Systems Interconnection (OSI), the part of an application process that contains the OSI communications functions. Application entities can have more than one application association.
2. An independent, self-contained, distinct set of software components that perform specific tasks.

application-instance DVIPA
A dynamic VIPA activated by an application that explicitly issues a bind() function call to the IP address.

application layer
In the Open Systems Interconnection (OSI) reference model, the layer that provides means for application processes residing in open systems to exchange information and that contains the application-oriented protocols by which these processes communicate.

Application Management Specification (AMS)
A specification standard that addresses the problems that are associated with managing multi-tiered applications.

application plane
The Tivoli NetView submap layer on which icons of managed objects of at least one network or systems management application are displayed without shading, making the icons appear directly against the background plane. See also background plane.

application program (AP)
A program used to communicate with stations in a network, enabling users to perform application-oriented activities.

application program identification
The symbolic name by which an application program is identified to VTAM. It is specified in the APPLID parameter of the ACB macroinstruction.

application program major node
In VTAM, a group of application program minor nodes. In the VTAM definition library, it is a member, book, or file that contains one or more APPL statements, which represent application programs. In MVS, it is a member of the library; in VSE, it is a book; and in VM, it is a CMS file of file type VTAMLST.

application programming interface (API)
An interface that allows an application program that is written in a high-level language to use specific data or functions of the operating system or another program.

application registration file (ARF)
The registration file created when an application program is integrated into Tivoli NetView that identifies how to start the application program, where the help information is located, and where the application program appears in the Tivoli NetView menu structure.

application transaction program
A program that runs an application or part of an application. See also service transaction program.

Application Transparent Transport Layer Security (AT-TLS)

apply To carry out the selected choice in a window without closing the window.

APPN See Advanced Peer-to-Peer Networking.

APPN connection
A type 2.1 connection between two APPN-configured nodes.

APPN Implementors Workshop (AIW)
The architectural standards body that defined and maintained the APPN protocol specifications.

APPN intermediate routing
The capability of an APPN network node to accept traffic from one adjacent node and pass it on to another, with awareness of session affinities in controlling traffic flow and outage notifications.

APPN intermediate routing network
The portion of an APPN network consisting of the network nodes and their interconnections.

APPN network
A network of systems connected through Advanced Peer-to-Peer Networking.

APPN network node
A node that offers a broad range of user services, including distributed directory services, intermediate routing services within an APPN network, and other services.

APPN node
A single node that forms part of the APPN network.

APPN subnetwork
A group of APPN nodes that are topologically isolated from other APPN nodes via a border node boundary.

APPN subnetwork visit count
The number of APPN subnetworks that an APPN search has traversed.

APR See alternate path retry.

AR See access register.

ARB congestion control
See adaptive rate-based congestion control.

arbitrary MAC addressing (AMA)
In DECnet architecture, an addressing scheme that is used by DECnet Phase IV-Prime that supports universally administered addresses and locally administered addresses.

arc In graphs, a curve or line segment that links two vertices.

area In Internet and DECnet routing protocols, a subset of a network or gateway grouped together by definition of the network administrator. Each area is self-contained; knowledge of an area's topology remains hidden from other areas.

area border router (ABR)
A router that is located on the border of OSPF areas and connects these areas to the backbone network. An area border router has multiple interfaces to multiple areas, maintains separate link-state databases for each area, and maintains a routing table describing both the backbone topology and the topology of the other areas.

ARF See application registration file.

argument
An independent variable or any value of an independent variable. Examples of arguments are a search key and a number identifying the location of an item in a table.

AR mode
See access register mode.

ARP See Address Resolution Protocol.

ARPA See Advanced Research Projects Agency.

ARPANET
A network established by the United States Department of Defense Advanced Research Projects Agency (now the Defense Advanced Research Projects Agency).

AS See autonomous system.

ASCII See American Standard Code for Information Interchange.

ASID See address space identifier.

ASM See address space manager.

ASN See autonomous system number.

ASN.1 See Abstract Syntax Notation One.

assigned focal point
A focal point at which a node is included in a sphere of control (SOC) by explicit definition at either the focal point or SOC node. When a node's inclusion in the sphere of control is defined at the focal point, the focal point is termed an explicit focal point for that SOC node. When a node's inclusion in the sphere of control is defined at the SOC node, the focal point is termed an implicit focal point for that node. See also default focal point.

associated address space
In VTAM, the address space in which RPL-based requests are issued that specify an access method control block (ACB)that is opened in another address space. See also ACB address space, session address space.

association
In VTAM CMIP services, the cooperative relationship between application entities for data exchange. See also remote association.

asynchronous
Pertaining to events that are not synchronized in time or do not occur in regular or predictable time intervals. See also synchronous.

asynchronous balanced mode (ABM)
In communications, an operational mode of a balanced data link in which

either combined station can send commands at any time and can initiate transmission of response frames without explicit permission from the other combined station.

asynchronous communication
A method of communication supported by the operating system that allows an exchange of data with a remote device, using either a start-stop line or an X.25 line. Asynchronous communication includes the file transfer support and the interactive terminal facility support. See also start-stop, synchronous operation.

Asynchronous Communications Device Interface (ACDI)
An application programming interface or service that is used by application programs. Application programs use the ACDI service to communicate with programs on other systems that use asynchronous communications.

asynchronous monitor
A monitor that receives data in an unsolicited event and interprets the data immediately.

asynchronous operation
An operation that occurs without a regular or predictable time relationship to a specified event. While the asynchronous operation is performed, the application program is allowed to continue execution. For example, the calling of an error diagnostic routing may receive control at any time during the execution of a computer program. See also synchronous operation.

asynchronous request
A request for an asynchronous operation. See also synchronous request.

asynchronous transfer mode (ATM)
A communication method in which information is organized into small, fixed-length cells that recur without regular or predictable time relationships. ATM incorporates network switches and negotiated service connections.

Athena widget set
A set of X Window System widgets that are developed by the Massachusetts Institute of Technology (MIT) for Project Athena. See also X Window System.

ATM See asynchronous transfer mode.

ATM adaptation layer (AAL)
A layer in the asynchronous transfer mode (ATM) endsystem model that defines services provided by the ATM layer as needed by the higher layers. AALs in separate ATM endsystems communicate with each other using a standardized peer protocol. There are several classes of ATM adaptation layers, each of which corresponds to a major type of network traffic (for example, data, voice, or video).

ATM campus network
A network of ATM nodes providing connectivity for ATM endsystems located in buildings within the same general area (for example, the distance between buildings is 1 kilometer or less).

ATM endpoint
See ATM endsystem.

ATM endsystem
A node at which an asynchronous transfer mode (ATM) connection is initiated or terminated. An originating endsystem initiates the ATM connection, and a terminating endsystem terminates the ATM connection.

ATM traffic descriptor
A list of traffic parameters (such as forward/backward peak cell rate or forward/backward maximum burst size) that can be used to capture the intrinsic traffic characteristics of a requested asynchronous transfer mode (ATM) connection.

ATP See AppleTalk Transaction Protocol.

attach

1. To make a device a logical part of a network.
2. In z/OS, to create a task that can execute concurrently with the attaching code.

attaching device
Any device that is physically connected to a network and can communicate over the network. See also station.

attachment unit interface (AUI)
In a local area network, the interface between the medium attachment unit and the data terminal equipment within a data station.

attention identifier (AID)
A character in a data stream that is sent to the host system when a display station user presses an attention identifier (AID) key. Typical AID keys are function keys or the Clear, Enter, Page Up, Page Down, Help, Print, and Home keys.

attention key
A function key on terminals that, when pressed, causes an I/O interruption in the central processing unit.

AT-TLS
See Application Transparent Transport Layer Security.

attribute

1. A property, quality, or characteristic whose value contributes to the specification of an element or program function. For example, "cost" or "location" are attributes that can be assigned to a resource.
2. A characteristic or trait of an entity that describes the entity; for example, the telephone number of an employee is one of the employee attributes. See also entity.
3. In object-oriented programming, a property of an object or class that can be distinguished distinctly from any other properties. Attributes often describe state information.

AUI See attachment unit interface.

authentication

1. The process of validating the identity of a user or server.
2. In computer security, verification of the identity of a user or process and the construction of a data structure that contains the privileges that were granted to the user or process.

authentication entity
In the Simple Network Management Protocol (SNMP), the network

management agent responsible for verifying that an entity is a member of the community it claims to be in. This entity is also responsible for encoding and decoding SNMP messages according to the authentication algorithm of a given community.

authentication failure
In the Simple Network Management Protocol (SNMP), a trap that may be generated by an authentication entity when a requesting client is not a member of the SNMP community.

authentication service
1. One of the three services provided by the Security Service in the Distributed Computing Environment (DCE). It verifies principals according to a specified authentication protocol. The other Security services are the Privilege Service and the Registry Service.
2. A service that verifies the validity of an account; applications authenticate against their own user store or against a corporate directory.

authentication token
See security token.

authorization
1. The process of granting a user, system, or process either complete or restricted access to an object, resource, or function.
2. In computer security, the right granted to a user to communicate with or make use of a computer system.

authorized APPN end node
In APPN, an end node that is trusted by its network node server to supply directory and routing information about its resources that will affect the network directory database. If a node is authorized, all information it sends about itself is accepted. The authorization status of an end node is system-defined in its network node server.

authorized end node
See authorized APPN end node.

authorized operator
An operator who is authorized to receive undeliverable messages and lost terminal messages. See also authorized receiver.

authorized path
A facility that enables an application program to specify that a data transfer or related operation be carried out in a privileged and more efficient manner.

authorized program analysis report (APAR)
A request for correction of a defect in a supported release of a program supplied by IBM.

authorized receiver
An authorized operator who receives the unsolicited and authorized-receiver messages that are not assigned to a specific operator. See also authorized operator.

auto-answer
See automatic answering.

auto-baud
In CCP, a line speed designation by which the IBM 3710 Network Controller determines the line speed.

auto-call
See automatic calling.

autologon
See automatic logon.

automated console operation (ACO)
The use of an automated procedure to replace or simplify the action that an operator takes from a console in response to system or network events.

Automated Operator (AO)
An application program that can issue a subset of IMS operator commands and receive status information on the execution of the commands.

automatic activation
In VTAM, the activation of links and link stations in adjacent subarea nodes as a result of channel device name or RNAME specifications related to an activation command that names a subarea node. See also direct activation.

automatic answering
A machine feature that permits a station to respond without operator action to a call it receives over a switched line. See also automatic calling.

automatic calling
1. Calling in which the elements of the selection signal are entered into the data network contiguously at the full data signaling rate. The selection signal is generated by the data terminal equipment.
2. A feature that permits a station to initiate a connection with another station over a switched line without operator action. See also automatic answering.

automatic calling unit (ACU)
A dialing device that permits a computer to automatically dial calls over a network.

automatic deactivation
In VTAM, the deactivation of links and link stations in adjacent subarea nodes as a result of a deactivation request that names a subarea node. Automatic deactivation occurs only for automatically activated links and link stations that have not also been directly or indirectly activated. See also direct deactivation.

automatic logoff
The process that a server uses to disconnect a connection when no data has been transmitted for a given period of time.

automatic logon (autologon)
1. In VM, a process by which a virtual machine is initiated by something other than the user of that virtual machine; for example, the primary VM operator's virtual machine is activated automatically during VM initialization.
2. A process by which VTAM automatically creates a session-initiation request to establish a session between two logical units (LUs). The session is between a designated primary logical unit (PLU) and a

secondary logical unit (SLU) that is neither queued for nor in session with another PLU. See also controlling logical unit.

automatic network routing (ANR)
In High-Performance Routing (HPR), a highly efficient routing protocol that minimizes cycles and storage requirements for routing network layer packets through intermediate nodes on the route. See also Rapid Transport Protocol.

automatic reactivation
In Tivoli NetView for OS/390, the activation of a node from the inactive state without user intervention

automatic single-route broadcast
A function that is used by some IBM bridge programs to determine the correct settings and to set the bridge single-route broadcast configuration parameters dynamically, without operator intervention. As bridges enter and leave the network, the parameter settings may need to change to maintain a single path between any two LAN segments for single-route broadcast messages.

automation
A program or facility that performs certain operations automatically in response to system events or user preferences.

autonomous system (AS)
In TCP/IP, a group of networks and routers under one administrative authority. These networks and routers cooperate closely to propagate network reachability (and routing) information among themselves using an interior gateway protocol of their choice. See also area.

autonomous system number (ASN)
In TCP/IP, a number that is assigned to an autonomous system by the same central authority that assigns IP addresses. The autonomous system number makes it possible for automated routing algorithms to distinguish autonomous systems.

autonomous system path
In the Border Gateway Protocol (BGP), the autonomous systems that are traversed to reach the networks listed in the update message. The path helps to suppress looping of routing information.

auto-parity
In CCP, a method that allows an IBM 3710 Network Controller to decide whether to use an odd or even parity when communicating with an SS terminal.

auto-removal
In the NetView program, the removal of a device from the data passing activity without human intervention. This action is accomplished by the adapter.

autotask
An unattended operator station task that does not require a terminal or a logged-on user. Autotasks can run independently of VTAM and are typically used for automated console operations. See also logged-on operator.

auxiliary equipment
Equipment that is not under direct control of the processing unit.

auxiliary network address
In VTAM, any network address, except the main network address, that is assigned to a logical unit capable of having parallel sessions. See also main network address.

availability
1. The condition allowing users to access and use their applications and data.
2. The degree to which a system or resource is ready when needed to process data.
3. The time periods during which a resource is accessible. For example, a contractor might have an availability of 9 AM to 5 PM every weekday, and 9 AM to 3 PM on Saturdays.
4. The delivery of reliable service during scheduled periods.
5. The total amount of time that a resource can devote to new assignments.

availability management
A service management process that helps to define customer requirements for information technology service availability, the capabilities of the IT infrastructure to deliver those levels of availability, and the actions that are needed to improved availability. See also deployment management, operations and administration, security management.

available
Pertaining to a logical unit or device that is active, connected, enabled, and not at its session limit.

B

B See byte.

backbone
A set of nodes and their interconnecting links that form a central, high-speed network which interconnects other, typically lower-speed, networks or client nodes.

backbone average distance
See NETID backbone average distance.

backbone diameter
See NETID backbone diameter.

backbone LAN segment
In a multiple segment configuration of a LAN, a centrally located LAN segment to which other LAN segments are connected by means of bridges.

backbone network
A central network to which smaller networks, normally of lower speed, connect. The backbone network usually has a much higher capacity than the networks it helps interconnect or is a wide-area network (WAN) such as a public packet-switched datagram network.

backbone router
A router that is used to transmit data between areas.

back-end program
In the AIX operating system, the program that sends output to a particular device.

background picture
The diagram or image that is displayed behind other symbols to show the context or relations of those symbols.

background plane
The Tivoli NetView submap layer that provides the background for the application plane. The background plane can display a picture that provides context for viewing the icons of the application plane. See also application plane.

background process
1. A process that does not require operator intervention but can be run by the computer while the workstation is used to do other work. See also foreground process.
2. In the AIX operating system, a mode of program execution in which the shell does not wait for program completion before prompting the user for another command.

background task
A task that is running even though the user is not currently interacting with it. See also foreground task.

backout
The process of removing all the database updates performed by an application program that has terminated abnormally.

back-to-back gateways
Two gateways separated by one intervening network that contains no gateway system services control point (SSCP) function involved with either of the two gateway NCPs.

backup
Pertaining to a system, device, file, or facility that can be used in the event of a malfunction or loss of data.

backup focal point
A focal point that provides management services support for a particular category for a node in the event of a communications failure with the primary focal point. Both assigned focal points (explicit and implicit) and default focal points can have backup counterparts.

backup host
A host that is designated as a backup in the event that the distributing host should malfunction. The backup host takes over the IP address of the distributing host when required. See also distributing host.

backup session
The session that replaces the failing primary extended recovery facility (XRF) session between a terminal user and the active subsystem.

balanced data link
In data communication, a data link between two participating combined stations. For transmissions it originates, each station can transmit both command frames and response frames, organize its data flow, and perform error recovery operations at the data link level.

balanced routing
A method of assigning network routes so that all routes are used equally.

BAN See boundary access node.

BAN connection
The connection from an SNA peripheral node through a boundary access node (BAN) over a frame-relay link to a subarea boundary node. The two portions of the BAN connection (one between the peripheral node and the BAN, and the other between the BAN and the boundary node) use different MAC addresses to identify the boundary node. See also BAN DLCI MAC address, boundary node identifier.

BAN DLCI MAC address
The MAC address that identifies a subarea boundary node as the source or destination of frames carried over the portion of a BAN connection between an SNA peripheral node on a LAN and a boundary access node (BAN). The BAN DLCI MAC address appears as the source MAC address in frames sent from the BAN to the peripheral node and as the destination MAC address in frames sent from the peripheral node to the BAN. The portion of the BAN connection between the BAN and the boundary node uses the boundary node identifier (BNI) rather than the BAN DLCI MAC address. See also BAN connection.

bandwidth
1. In asynchronous transfer mode (ATM), the capacity of a virtual channel, expressed in terms of peak cell rate (PCR), sustainable cell rate (SCR), and maximum burst size (MBS).
2. The difference, expressed in hertz, between the highest and the lowest frequencies of a range of frequencies.

baseband
A frequency band that uses the complete bandwidth of a transmission and requires all stations in the network to participate in every transmission.

Base Control Program (BCP)
A program that provides essential services for the MVS and z/OS operating systems. The program includes functions that manage system resources. These functions include input/output, dispatch units of work, and the z/OS UNIX System Services kernel. See also Multiple Virtual Storage.

BASE disk
In the VM operating system, the virtual disk that contains the text decks and macroinstructions for VTAM, NetView, and VM/SNA console support (VSCS). It also contains control files and sample files used when running VTAM on the VM operating system. See also DELTA disk.

base set
The set of functions, including verbs, parameters, return codes, and what-received indications, that is supported by all products that implement a particular architecture. See also option set.

basic conversation
In APPC, a conversation between two programs in which the sending program must construct generalized data stream (GDS) records for the receiving program. See also mapped conversation.

Basic Encoding Rules (BER)
A set of rules used to encode Abstract Syntax Notation One (ASN.1) values as strings of octets. See also abstract syntax, Abstract Syntax Notation One.

basic information unit (BIU)
In SNA, the unit of data and control information passed between the

transmission and control layers. It consists of a request or response header followed by a request or response unit.

basic input/output system (BIOS)
The code that controls basic hardware operations, such as interactions with diskette drives, hard disk drives, and the keyboard. See also NetBIOS.

basic link unit (BLU)
In SNA, the unit of data and control information transmitted over a communications line by data link control.

Basic Object Adapter (BOA)
Software that provides CORBA-compliant services for object implementations.

basic sequential access method (BSAM)
An access method for storing or retrieving data blocks in a continuous sequence, using either a sequential access or a direct access device.

basic transmission unit (BTU)
In SNA, the unit of data and control information passed between path control components. A BTU can consist of one or more path information units (PIUs). See also blocking of PIUs.

batch

1. A group of records or data processing jobs brought together for processing or transmission.
2. Pertaining to a group of jobs to be run on a computer sequentially with the same program with little or no operator action. See also interactive.

batch file
A file containing data that is to be processed unattended.

batch message processing program (BMP program)
An IMS batch processing program that has access to online databases and message queues. BMP programs run online, but like programs in a batch environment, they are started with job control language (JCL).

batch processing
A method of running a program or a series of programs in which one or more records (a batch) are processed with little or no action from the user or operator.

baud The number of changes in signal levels, frequency, or phase per second on a communication channel. If each baud represents 1 bit of data, baud is the same as bits per second. However, it is possible for one signal change (1 baud) to equal more than 1 bit of data.

Bayonet Neill-Concelman (BNC)
A standardized connector that is used with coaxial cable. For example, Ethernet is a network that uses this connector.

BB See begin bracket.

BCC See block-check character.

B-channel
See bearer channel.

BCP See Base Control Program.

BCUG See bilateral closed user group.

beacon frame
A frame sent by an adapter indicating a serious ring problem, such as a broken cable. An adapter is beaconing if it is sending such a frame.

beaconing
Pertaining to an adapter in a token-ring network that repeatedly sends a frame (beacon message) when it is not receiving a normal signal because of serious error, such as a line break or power failure. The message frame repeats until the error is corrected or bypassed.

bearer channel (B-channel)
In ISDN, a duplex channel for transmitting data or digital voice between the terminal and the network. The B-channel operates at 64 kilobits per second. See also delta channel.

Because It's Time Network (BITNET)
A low-cost, low-speed network of hosts interconnected by nonswitched SDLC and BSC lines that was started at the City University of New York. The network is primarily composed of universities, nonprofit organizations, and research centers. BITNET has merged with the Computer Science Network (CSNET) to form the Consortium for Research and Education Network (CREN).

begin bracket (BB)
In SNA, an indicator defining the start of a conversation. The value of the indicator (binary 1) in the request header of the first request in the first chain of a bracket denotes the start of a bracket. See also conditional end bracket, end bracket.

behavior
1. The way in which managed objects, name bindings, attributes, notifications, and operations interact with the actual resources that they model and with each other.
2. A collection of assertions that describe the allowed states that a managed object can assume. An assertion can be a precondition, a postcondition, or an invariant. In practice, the behavior is often an informal description of the semantics of attributes, operations, and notifications.

below-specific
In MPTN architecture, pertaining to a specific transport provider.

below-specific protocol boundary (BSPB)
In MPTN architecture, the interface between the common MPTN manager (CMM) and the protocol-specific MPTN manager (PMM).

BER See Basic Encoding Rules.

Berkeley Internet Name Domain (BIND)
The implementation of the Domain Name System (DNS).

Berkeley Software Distribution (BSD)
The name of any of the series of UNIX specifications or implementations distributed by the University of California at Berkeley.

best-effort delivery
In connectionless service, the unreliable delivery of datagrams in a network. Information about whether the packet was delivered is not provided to the sender.

BEX See branch extender.

BF See boundary function.

BGP See Border Gateway Protocol.

BGP configured neighbor
A specific router, as defined by its BGP neighbor's IP address, in a BGP group with which the IBM 6611 Network Processor exchanges routing information.

BGP group
An autonomous system that is made up of neighbors that are configured or learned. The neighbors have the same group type, such as external, test, internal, or Interior Gateway Protocol.

bid An attempt by the computer or by a station to gain control of a line in order to transmit data.

bidder
An SNA LU-LU half-session that is defined as requesting and receiving permission from another LU-LU half-session to begin a bracket at the start of a session. See also first speaker.

bidder session
See contention-loser session.

big endian
A format for storage or transmission of binary data in which the most significant value is placed first. See also little endian.

bilateral closed user group (BCUG)

1. In X.25 communications, an optional facility that allows calls to be made only between two designated DTEs.
2. In data communication, two users who have bilaterally agreed to communicate with each other, but not with other users. Each user can belong to more than one bilateral closed user group and to more than one closed user group by means of outgoing access. See also closed user group.

bilingual circuit
In DECnet architecture, a circuit that accepts, translates, and routes DECnet Phase IV and DECnet Phase IV-Prime frames. The circuit must be configured with the DECnet MAC address specific to the attached LAN segment.

bilingual command list
A command list written in a combination of REXX and the NetView command list language.

binary digit (bit)
The smallest unit of computer information. A bit has a value of 1 or 0.

binary synchronous communication (BSC)
A data-communication line protocol that uses a set of transmission control characters and control character sequences to send binary-coded data over a communication line. See also Synchronous Data Link Control.

binary synchronous transmission (bisync)
Data transmission in which synchronization of characters is controlled by timing signals generated at the sending and receiving stations.

BIND See Berkeley Internet Name Domain.

bind To relate an identifier to another object in a program. Examples of binding

are relating an identifier to a value, an address, or another identifier, or associating formal parameters and actual parameters.

BIND command
In SNA, a command used to start a session between two logical units, and to define the characteristics of that session.

BIND pacing
A technique by which the address space manager (ASM) at one node controls the rate of transmission of BIND requests of a sending ASM at another node. BIND pacing can be used to prevent BIND standoff, in which each of two nodes has reserved most of its resources for sessions it is attempting to initiate through the other and thus rejects any BINDs received from the other.

BIOD See block input/output daemon.

BIOS See basic input/output system.

bisync See binary synchronous transmission.

bit See binary digit.

bit clocking
In an EIA 232 interface, the field that indicates which piece of equipment, either the modem or the computer, provides the clock signal for synchronized data transactions.

bitmap
1. A representation of an image by an array of bits.
2. A pixmap with a depth of one bit plane.

BITNET
See Because It's Time Network.

bits per second (bps)
In serial transmission, the instantaneous bit speed with which a device or channel transmits a character.

BIU See basic information unit.

BIU segment
In SNA, the portion of a basic information unit (BIU) that is contained within a path information unit (PIU). It consists of either (a) a request/response header (RH) followed by all or a part of a request/response unit (RU) or (b) a part of an RU.

block A string of data elements recorded, processed, or transmitted as a unit. The elements can be characters, words, or physical records.

block-check character
1. In longitudinal redundancy checking and cyclic redundancy checking, a character that is transmitted by the sender after each message block and is compared with a block-check character computed by the receiver to determine if the transmission was successful.
2. The BSC transmission control character that is used to determine if all of the bits that were sent were also received.

blocking mode
A way of requesting a service over an interface so that if the request cannot be completed immediately, the requesting process is suspended until the request is completed. See also nonblocking mode.

blocking of PIUs
In SNA, an optional function of path control that combines multiple path information units (PIU) in a single basic transmission unit (BTU). See also basic transmission unit.

block input/output daemon (BIOD)
In the Network File System (NFS), a daemon that performs parallel read/write requests on behalf of an NFS client.

block length
See block size.

block size
A measure of the size of a block, usually specified in units such as records, words, computer words, or characters. Block size is sometimes referred to as block length and physical record size.

BLU See basic link unit.

BMP program
See batch message processing program.

BN See boundary node.

BNC See Bayonet Neill-Concelman.

BNI See boundary node identifier.

BNN See boundary network node.

BOA See Basic Object Adapter.

Boolean
Characteristic of an expression or variable that can only have a value of true or false.

boot To load an operating system or start the system.

Border Gateway Protocol (BGP)
An Internet Protocol (IP) routing protocol used between domains and autonomous systems. See also Exterior Gateway Protocol.

border node
An APPN network node that interconnects APPN networks having independent topology databases in order to support LU-LU sessions between these networks.

border router
In Internet communications, a router, positioned at the edge of an autonomous system, that communicates with a router that is positioned at the edge of a different autonomous system.

bottleneck
A place in the system where contention for a resource is affecting performance.

boundary access node (BAN)
A router (such as the IBM 6611) that provides its attached LAN-based SNA peripheral nodes direct frame-relay access to a subarea boundary node (such as an IBM 3745 or an IBM 3746 Model 900).

boundary function (BF)
1. In SNA, a capability of a subarea node to provide protocol support for attached peripheral nodes, such as: interconnecting subarea path control

and peripheral path control elements; performing session sequence numbering for low-function peripheral nodes; and providing session-level pacing support.

2. In SNA, the component that provides the capabilities to provide protocol support for attached peripheral nodes, such as interconnecting subarea path control and peripheral path control elements; performing session sequence numbering for low-function peripheral nodes; and providing session-level pacing support.

boundary network node (BNN)
In SNA, a subarea node that provides protocol support for adjacent peripheral nodes, for example, transforming network addresses to local addresses and vice versa, and providing session-level support for these peripheral nodes.

boundary node (BN)
In SNA, a subarea node with boundary function.

boundary node identifier (BNI)
The MAC address that identifies a subarea boundary node as the source or destination of frames carried over the portion of a BAN connection between the boundary node and the boundary access node (BAN). All frames sent by a BAN to the boundary node have their destination MAC address set to the BNI, and all frames sent by a boundary node to a BAN have their source MAC address set to the BNI. See also BAN connection.

bps See bits per second.

bracket
In SNA, one or more chains of request units and their responses, representing a complete transaction, exchanged between two session partners. See also end bracket.

bracket protocol
In SNA, a data flow control protocol in which exchanges between two session partners are achieved through the use of brackets, with one partner designated at session activation as the first speaker and the other as the bidder. The bracket protocol involves bracket initiation and termination rules. See also protocol.

branch exchange
A switching system that provides telephone communication between branch stations and external networks.

branch extender (BEX, BrEx)
An extension to the APPN network architecture that appears as a network node to the downstream end nodes in low entry networks, and as an end node to the wide area network.

branch network node
An APPN network node that implements the Branch Extender architecture. A branch network node appears to be an end node to the backbone network but acts as a network node to the branch network. There may be multiple branch network nodes in a branch, and an end node may receive network node services from any of these branch network nodes.

break signal
A signal sent over a remote connection to interrupt current activity on the remote system.

BrEx See branch extender.

bridge

1. In the connection of local loops, channels, or rings, the equipment and techniques used to match circuits and to facilitate accurate data transmission.
2. A functional unit that interconnects multiple LANs (locally or remotely) that use the same Logical Link Control (LLC) protocol but that can use different Media Access Control (MAC) protocols. A bridge forwards a frame to another bridge based on the MAC address. See also router.

bridged local area network

A collection of individual local area networks interconnected by medium access control (MAC) bridges.

bridge identifier

An 8-byte field, used in a spanning tree protocol, composed of the MAC address of the port with the lowest port identifier and a user-defined value.

bridging

In LANs, the forwarding of a frame from one LAN segment to another. The destination is specified by the medium access control (MAC) sublayer address encoded in the destination address field of the frame header.

broadband

A communication channel that uses a wide frequency range divided into narrower bands that can be made available to different users for the simultaneous transmission of different signals (such as voice, video, and data). A broadband channel is capable of higher-speed data transmission than a voice-grade channel.

broadband LAN

A local area network in which data are encoded, multiplexed, and transmitted with modulation of carriers. A broadband LAN consists of more than one channel.

broadcast

The simultaneous transmission of data to more than one destination. See also multicast, unicast.

broadcast address

In communications, a station address (eight 1's) reserved as an address common to all stations on a link.

broadcast Locate search

See broadcast search.

broadcast search

The simultaneous propagation of a search request to all network nodes in an APPN network. This type of search may be used when the location of a resource is unknown to the requester.

broadcast storm

A situation where one message that is broadcast across a network results in multiple responses. Each response generates more responses, causing excessive transmission of broadcast messages. Severe broadcast storms can block all other network traffic, but they can usually be prevented by carefully configuring a network to block illegal broadcast messages.

browse

To look at information without changing it. See also monitor.

BSAM
See basic sequential access method.

BSC See binary synchronous communication.

BSD See Berkeley Software Distribution.

BSPB See below-specific protocol boundary.

BTU See basic transmission unit.

buffer An area of storage that compensates for the different speeds of data flow or timings of events by temporarily holding a block of data to be processed or written to an I/O device.

buffer group
In VTAM, a group of buffers associated with one or more contiguous, related entries in a buffer list. The buffers may be located in discontiguous areas of storage, and may be combined into one or more request units.

buffer list
In VTAM, a contiguous set of control blocks (buffer list entries) that allow an application program to send function management data (FMD) from a number of discontiguous buffers with a single SEND macroinstruction.

buffer list entry
A control block within a buffer list that points to a buffer containing function management data (FMD) to be sent.

buffer pool
An area of memory into which data pages are read and in which they are modified and held during processing. See also address space.

bulletin board
The mechanism by which the Tivoli Management Framework and Tivoli applications communicate with Tivoli administrators. The bulletin board collects notices in notice groups. Administrators can access the bulletin board from the Tivoli desktop. The bulletin board is an audit trail for important operations that the administrators perform.

burst In data communication, a sequence of data counted as one unit in accordance with some specific criterion or measure.

bus

1. A computer configuration in which processors are interconnected in series.
2. A facility for transferring data between several devices located between two end points, only one device being able to transmit at a given moment.

bus master
A device or subsystem that controls data transfers between itself and a subordinate.

bus network
A local area network in which there is only one path between any two data stations and in which data transmitted by any station is concurrently available to all other stations on the same transmission medium.

button

1. A mechanism on a pointing device, such as a mouse, used to request or start an action.

2. A graphic that executes an action when clicked.

bypass
To eliminate a station or an access unit from a ring network by allowing the data to flow in a path around it.

byte (B)
A string that represents a character and usually consists of eight binary digits that are treated as a unit. A byte is the smallest unit of storage that can be addressed directly.

byte multiplexer channel
A multiplexer channel that interleaves bytes of data.

byte ordering
The arrangement of bytes under specific machine architectures. Two common methods of byte ordering are big endian and little endian.

byte reversal
A technique in which numeric data is stored with the least significant byte first. The least significant byte is the lowest byte in a number, located at the far right of a string.

C

CA

1. See channel adapter.
2. See certificate authority.

cable segment
A section of cable between components or devices on a network. A segment may consist of a single patch cable, multiple patch cables that are connected to one another, or a combination of building cable and patch cables that are connected to one another.

cache

1. A buffer that contains frequently accessed instructions and data; it is used to reduce access time.
2. To place, hide, or store frequently used information locally for quick retrieval.

cage See I/O cage.

call

1. A physical or logical connection between one or more parties in a telephone call.
2. To start a program or procedure, usually by specifying the entry conditions and transferring control to an entry point.

call-accepted packet
A call supervision packet that a called data terminal equipment (DTE) transmits to indicate to the data circuit-terminating equipment (DCE) that it accepts the incoming call. See also call connected packet, call request packet.

callback
In the AIX operating system, a procedure that is called if and when certain specified conditions are met.

callback registration
The identification and registration of a callback routine.

call connected packet
In X.25 communications, a call supervision packet transmitted by a DCE to inform the calling DTE of the complete establishment of the call. See also call request packet, call-accepted packet.

called party
On a switched line, the location to which a connection is established.

call establishment
The complete sequence of events that is necessary to establish a data connection.

CALLIN
The logical channel type on which the data terminal equipment (DTE) can receive a call, but cannot send one.

calling
In X.25 communications, pertaining to the location or user that makes a call.

calling party
On a switched line, the location that originates a connection.

CALLIO
The logical channel type on which the data terminal equipment (DTE) can send or receive a call.

CALLOUT
The logical channel type on which the data terminal equipment (DTE) can send a call, but cannot receive one.

call progress signal
A call control signal transmitted from the data circuit-terminating equipment (DCE) to the calling data terminal equipment (DTE) to indicate the progress of the establishment of a call, the reason why the connection could not be established, or any other network condition.

call request packet
A call supervision packet that a data terminal equipment (DTE) transmits to ask that a connection for a call be established throughout the network. See also call connected packet, call-accepted packet.

call request signal
During the establishment of a connection for a call, a signal that informs the data circuit-terminating equipment (DCE) that a data terminal equipment (DTE) has asked to make a call.

call supervision packet
A packet used to establish or clear a call at the interface between the data terminal equipment (DTE) and the data circuit-terminating equipment (DCE).

call user data (CUD)
User-specified data that can be placed in an X.25 call request packet to be sent to the adjacent node.

cancel closedown
A closedown in which a program is abnormally terminated either because of an unexpected situation or as the result of an operator command. See also orderly closedown, quick closedown.

canonical address
In LANs, the IEEE 802.1 format for the transmission of medium access control (MAC) addresses for token-ring and Ethernet adapters. In canonical format, the least significant (rightmost) bit of each address byte is transmitted first. See also noncanonical address.

capacity
A measure of how much volume or revenue can be handled by a specific resource.

capture to file
To save data into a file.

card An electronic circuit board that is plugged into a slot in a system to give it added capabilities.

cardinality
The number of rows in a database table or the number of elements in an array.

carrier A continuous frequency (a pulse train, or an electric or electromagnetic wave) that may be varied by a signal bearing information to be transmitted over a communication system.

carrier management system
A network management product that a communication common carrier provides to a customer; this product monitors and manages the telecommunication equipment that the communication common carrier provides for the customer's network.

carrier sense
In a local area network, an ongoing activity of a data station to detect whether another station is transmitting.

Carrier Sense Multiple Access with Collision Detection (CSMA/CD)
An arbitration protocol in which multiple stations access the network without explicit coordination, avoiding contention by checking for other signals (sensing the carrier) and deferring if a signal is already present. Should two signals collide, each station detects the collision and transmits again after a random amount of time.

cascaded menu
A menu that appears from, and contains choices related to, a cascading choice in another menu.

cascading choice
A choice on a menu that, when selected, presents another menu with additional related choices.

casual connection
In an APPN network, a connection between an end node and a network node with different network identifiers.

catalog
1. A directory of files and libraries, with reference to their locations.
2. To enter information about a data set or a library into a catalog.

CBX See computerized branch exchange.

CC See change control.

CCP See Configuration Control Program.

CCS See console communication service.

CCU See central control unit.

CCW See channel command word.

CDLC See Channel Data Link Control protocol.

CDLC protocol
See Channel Data Link Control protocol.

CDNM session
See cross-domain network manager session.

CDRM
See cross-domain resource manager.

CDRSC
See cross-domain resource.

CDS

1. See control data set.
2. See Cell Directory Service.
3. See central directory server.

CDSTL
See connect data set to line.

CEB See conditional end bracket.

cell In asynchronous transfer mode (ATM), a medium access control (MAC) protocol data unit (PDU) of fixed size.

Cell Directory Service (CDS)
A Distributed Computing Environment (DCE) component that manages a database of information about the resources within a cell. See also Global Directory Service.

central control unit (CCU)
The communication controller hardware unit that contains the circuits and data flow paths needed to execute instructions and to control controller storage and the attached adapters.

central directory
A repository for storing resource location information centrally registered by network nodes or cached as the result of network searches.

central directory server (CDS)
A network node that provides a repository for information on network resource locations. It also reduces the number of network searches by providing a focal point for queries and broadcast searches, and by storing the results of network searches to avoid later broadcasts for the same information.

central processing unit (CPU)
See processor.

central processor complex (CPC)
A physical collection of hardware that consists of main storage, one or more central processors, timers, and channels.

central resource registration
A process in which an APPN network node sends information about itself and its client end nodes to a central directory server.

central site control facility (CSCF)
In Tivoli NetView for OS/390, NetView for VM, and NetView for VSE, a function that allows a network operator to run the test facilities of the IBM 3172 Nways Interconnect Controller and the IBM 3174 Establishment Controller remotely from the NetView console.

certificate authority (CA)
A trusted third-party organization or company that issues the digital certificates. The certificate authority typically verifies the identity of the individuals who are granted the unique certificate. See also Secure Sockets Layer.

CF See coupling facility.

chain

1. A group of logically linked records that are transferred over a communications line.
2. A group of request units delimited by begin-chain and end-chain. Responses are always single-unit chains.

change control (CC)
The use of change management commands for the installation or removal of software or data.

change control administrator
A person responsible for software distribution and change control activities.

change control client
A workstation that (a) receives software and data files from its change control server and (b) installs and removes software and data files as instructed by its change control server. See also change control single node.

change control domain
A change control server and its change control clients.

change control server
A system that controls and tracks the distribution of software and data files to other workstations. See also change control single node.

change control single node
A workstation that controls, tracks, installs, and removes software and data files for itself. A CC single node can also prepare software for distribution. See also change control client, change control server.

change-direction protocol
In SNA, a data flow control protocol in which the sending logical unit (LU) stops sending normal-flow requests, signals this fact to the receiving LU using the change-direction indicator (in the request header of the last request of the last chain), and prepares to receive requests.

change management
The process of planning (for example, scheduling) and controlling (for example, distributing, installing, and tracking) software changes over a network.

change number of sessions (CNOS)
An internal transaction program that regulates the number of parallel sessions between the partner LUs with specific characteristics.

channel

1. In mainframe computing, the part of a channel subsystem that manages a single I/O interface between a channel subsystem and a set of control units.
2. A link along which signals can be sent, such as the channel that handles the transfer of data between processor storage and local peripheral equipment. See also trunk.

channel adapter (CA)
A communication controller hardware unit that is used to attach the communication controller to a host channel.

channel-attached
1. Pertaining to devices attached to a controlling unit by cables, rather than by telecommunication lines. See also link-attached.
2. Pertaining to the attachment of devices directly by input/output channels to a host processor.

channel-attachment major node
A major node that may include minor nodes that are resources (host processors, NCPs, line groups, lines, SNA physical units and logical units, cluster controllers, and terminals) attached through a communication adapter.

channel command word (CCW)
In zSeries systems, an 8-byte command issued to the channel subsystem by a central processor and operating asynchronously with the issuing processor.

Channel Data Link Control protocol (CDLC, CDLC protocol)
A channel communications protocol that is used to communicate between VTAM and a front end processor (either hardware or emulated).

channel link
A System/390 I/O channel-to-control-unit interface that has an SNA network address. A channel link can be a subarea link, a peripheral link, a LEN link, or an APPN link. See also subarea link.

channel path
In mainframe computing, the interconnection between a channel and its associated control units.

channel-path identifier (CHPID)
A value assigned to each installed channel path of the system that uniquely identifies that path to the system.

channel service unit (CSU)
A device used to connect a digital phone line to a multiplexer, a channel bank, or directly to another device producing a digital signal. A CSU performs certain line-conditioning and equalization functions, and responds to loopback commands sent from the central office (CO). See also data service unit.

channel status word (CSW)
A field that provides the program with the status of an I/O device or the conditions under which an I/O operation has been terminated.

channel subsystem (CSS)
A collection of subchannels that directs the flow of information between I/O devices and main storage, relieves the processor of communication tasks, and performs path management functions.

channel-to-channel (CTC)
Pertaining to the physical connection or the interaction of two devices.

character times
In CCP, the maximum number of times that the temporary text delay character can (a) be sent to a terminal before the operation stops; or (b) be sent between the end of a receive operation and the beginning of a transmit operation.

check box
A square box with associated text that represents a choice. When a user selects the choice, the check box is filled to indicate that the choice is selected. The user can clear the check box by selecting the choice again, thereby deselecting the choice.

checkpoint
A place in a program at which a check is made, or at which a recording of data is made to allow the program to be restarted in case of interruption.

checkpoint data set
A local data set that contains Common Queue Server (CQS) system checkpoint information about a group of shared queues.

checksum
1. On a diskette, data written in a section for error detection purposes.
2. The sum of a group of data that is associated with a group of data and that is used for error detection.

child Pertaining to a secured resource, either a file or library, that uses the user list of a parent resource. See also parent.

child process
A process that is created by a parent process and that shares the resources of the parent process to carry out a request.

child resource
A secured resource, either a file or library, that uses the user list of a parent resource. A child resource can have only one parent resource.

CHPID
See channel-path identifier.

CICS An IBM licensed program that provides online transaction-processing services and management for business applications.

CID See communication identifier.

CID methodology
An IBM-specified way to install and configure products on, or remove products from, remote workstations and hosts. Response files and redirected installation and configuration may be used by a CID-enabled product to eliminate or reduce user interaction with the CID-enabled product. See also response file.

CINIT See control initiate.

circuit One or more conductors through which an electric current can flow. See also link, packet switching.

circuit-switched data transmission service
A service that uses circuit switching to establish and maintain a connection before data can be transferred between data terminal equipment (DTE). See also packet-switched data transmission service.

circuit switching
A process that, on demand, connects two or more data terminal equipment (DTEs) and permits the exclusive use of a data circuit between them until the connection is released. See also message switching, packet switching.

circular log
A database log in which records are overwritten if they are no longer needed by an active database.

C language
A language used to develop application programs in compact, efficient code that can be run on different types of computers with minimal change.

class In object-oriented design or programming, a model or template that can be used to create objects with a common definition and common properties, operations, and behavior. An object is an instance of a class.

class A network
In Internet communications, a network in which the high-order (most significant) bit of the IP address is set to 0 and the host ID occupies the three low-order octets.

class B network
In Internet communications, a network in which the two high-order (most significant and next-to-most significant) bits of the IP address are set to 1 and 0, respectively, and the host ID occupies the two low-order octets.

class C network
In Internet communications, a network in which the two high-order (most significant and next-to-most significant) bits of the IP address are both set to 1 and the next high-order bit is set to 0. The host ID occupies the low-order octet.

class of service (COS)
A set of characteristics (such as route security, transmission priority, and bandwidth) used to construct a route between session partners. The class of service is derived from a mode name specified by the initiator of a session.

class-of-service database
A database that is maintained independently by each network node, and optionally by APPN end nodes. The database contains one entry per class-of-service name. Each database entry contains: (a) A definition of the acceptable values for transmission group (TG) and node characteristics for routes described by that class-of-service name and the weight function to be used to compute the weights of nodes and TGs that meet the acceptable values; (b)The transmission priority to be used for traffic that flows on routes described by that class-of-service name.

CLAW See Common Link Access to Workstation.

cleanup
In SNA products, a network services request, sent by a system services control point (SSCP) to a logical unit (LU), that causes a particular LU-LU session with that LU to be ended immediately without requiring the participation of either the other LU or its SSCP.

clear-confirmation packet
In X.25 communication, a packet transmitted by the DTE to inform the DCE that a call has been cleared.

clear data
See plain text.

clear indication packet
In X.25 communications, a call supervision packet that a data circuit-terminating equipment (DCE) transmits to inform a data terminal equipment (DTE) that a call has been cleared.

clear request packet
A call supervision packet transmitted by a data terminal equipment (DTE) to ask that a call be cleared.

clear session
A session in which only clear data is transmitted or received. See also cryptographic session, selective cryptographic session.

clear to send (CTS)
In data communication, a signal raised by data circuit-terminating equipment (DCE) when it is ready to accept data, usually in response to request to send (RTS) being raised. See also request to send.

CLI See command-line interface.

client

1. A person or organization that receives a deliverable or work product. See also interprocess communication.
2. A software program or computer that requests services from a server. See also host, server.

Client daemon
A daemon that manages network connections to CICS servers. It processes ECI, EPI, and ESI requests, sending and receiving the appropriate flows from the CICS server to satisfy the application requests. The Client daemon (process cclclnt) exists only on distributed platforms.

client end node
An end node for which the network node provides network services.

client/server
Pertaining to the model of interaction in distributed data processing in which a program on one computer sends a request to a program on another computer and awaits a response. The requesting program is called a client; the answering program is called a server.

client workstation
In the NetView Graphic Monitor Facility, a workstation that depends on a server workstation to provide it with views and status information. A client workstation receives status information from the server workstation over an LU 6.2 session.

clipboard
An area of computer memory, or storage, that temporarily holds data. Data in the clipboard is available to other applications.

clipping
In computer graphics, removing those parts of display elements that lie outside of a given boundary.

clocking
In communications, a method of controlling the number of data bits sent on a communications line in a specified time.

clone An operation that enables an administrator to replicate profiles. This capability simplifies the task of creating multiple profiles with similar properties.

closed system
A system whose characteristics comply with proprietary standards and that therefore cannot readily be connected to other systems.

closed user group (CUG)
In data communication, a group of users who can communicate with other users in the group, but not with users outside the group. A data terminal equipment (DTE) may belong to more than one closed user group. See also bilateral closed user group.

CLP

1. See current line pointer.
2. See communication line processor.

CLPA See create link pack area.

CLU See control logical unit.

cluster

1. A collection of complete systems that work together to provide a single, unified computing capability.
2. In SNA, a group of stations that consist of a controller (cluster controller) and the workstations attached to it.

cluster controller
A device that can control the input/output operations of more than one device connected to it.

CLUT See color lookup table.

CMC See communication management configuration.

CMIP See Common Management Information Protocol.

CMIP services
The VTAM implementation of the Common Management Information Protocol (CMIP), which provides a common set of program services for application programmers to use in writing CMIP application programs. These services include controlling associations, converting basic encoding rules (BER) syntax, and validating protocols.

CMIS See common management information service.

CMM See common MPTN manager.

CMOT
See Common Management Information Protocol over TCP/IP.

CMS See Conversational Monitor System.

CNM See communication network management.

CNMI See communication network management interface.

CNN See composite network node.

CNOS See change number of sessions.

coattailing
The concept of VTAM's writing PIUs to NCP and reading PIUs from NCP with a single channel program. The values coded for the DELAY keywords

on the VTAM PCCU definition statement and the NCP LINE definition statement affect the degree of coattailing. A user can increase the probability of VTAM's writing and reading PIUs with a single channel program by adjusting these DELAY keywords. An increase in the degree of coattailing improves channel efficiency but may increase response time.

coaxial cable
A cable consisting of one conductor, usually a small copper wire, within and insulated from another conductor of larger diameter, usually copper tubing or copper braid.

codec A technology that compresses and decompresses data for the purpose of reducing the bandwidth required to send streaming data.

code group
In a computer security code system, an apparently meaningless sequence of letters, digits, or both, that represents a plaintext element, which may be a word, phrase, or sentence.

code page
A particular assignment of code points to graphic characters. Within a given code page, a code point can have only one specific meaning. A code page also identifies how undefined code points are handled. See also code point.

code point
1. For SNA alerts, a 1-or 2-byte hexadecimal code that designates a particular piece of text to be displayed at the focal point.
2. A unique bit pattern that represents a character in a code page. See also code page.

cold start
The process of starting a system or program using an initial program load procedure.

collection
In a Tivoli environment, a container that provides a single view of related resources.

collection point block (CPB)
In the NetView Performance Monitor (NPM), a control block used to coordinate the collection of network and session data.

collision
An unwanted condition that results from concurrent transmissions on a channel, causing the transmissions to be unintelligible.

collision detection
In carrier sense multiple access with collision detection (CSMA/CD), a signal indicating that two or more stations are transmitting simultaneously.

color lookup table (CLUT)
See color map.

color map
1. A lookup table in which each index is associated with a red, green, and blue value.
2. A set of color cells. A pixel value indexes the color map to produce RGB-intensities. A color map consists of a set of entries defining color values that, when associated with a window, is used to display the contents of the window.

color palette
A set of colors that can be displayed on the display at one time. This can be standard set used for all images or a set that can be customized for each image.

color table
See color map.

comb In a magnetic disk unit, an assembly of access arms that moves as a unit.

combined alert
In the NetView program, an alert that includes both a nongeneric alert and a generic alert in one network management vector transport.

command

1. A request from a terminal or automated operator for the performance of an operation or service, or for the execution of a particular program. See also response.
2. A statement used to initiate an action or start a service. A command consists of the command name abbreviation, and its parameters and flags if applicable.
3. In SNA, any field set in the transmission header (TH), request header (RH), or request unit (RU) that states an action or that starts a protocol. See also data traffic reset state.

command area
An area of a display screen in which the user enters commands.

command authorization
The process of authorizing a network operator to use various commands. See also NetView command authorization table, Resource Access Control Facility, System Authorization Facility.

command entry field
In Common User Access (CUA) architecture, an entry field in which a user types commands.

command facility
In Tivoli NetView for OS/390, the component that is a base for command processors that can monitor, control, and automate network operations.

command frame
A link-level frame or packet that is serviced as a command and (in most cases) expects a response.

command indicator
In the NetView Graphic Monitor Facility, a numeric identifier that is assigned to a network resource by its controlling resource manager. Each resource manager is assigned a range of values that can be defined.

command interpreter
See command language interpreter.

command language interpreter
A program that reads commands and changes them into computer instructions.

command line
The blank line on a display where commands, option numbers, or selections can be entered.

command-line interface (CLI)
A computer interface in which the input and output are text based.

command list
A list of commands and statements designed to perform a specific function for the user.

command name
The first term in a command, a verb, which specifies the action to be performed and is usually followed by operands.

command procedure
In the NetView for z/OS, a command list or a command processor that is written in a high-level language or a pipeline.

command processor
A module designed to perform a specific function for the user. Users can write command processors in assembler language or in a high-level language. Command processors are started as commands.

command prompt
A displayed character (or string of characters) that indicates that a user may enter a command to be processed.

commit operation
An operation that saves a file to permanent storage.

Common Link Access to Workstation (CLAW)
A continuously executing program designed to minimize host interrupts while maximizing channel utilization.

Common Management Information Protocol (CMIP)
In OSI, the management protocol (ISO 9596-2) that supports the common management information service.

Common Management Information Protocol over TCP/IP (CMOT)
An Internet Engineering Task Force (IETF) specification for the use of CMIP over a TCP/IP protocol stack.

common management information service (CMIS)
In OSI, the set of services defined by ISO 9595. The common management information service is used by agent processes and managing processes to communicate.

common MPTN manager (CMM)
The component of the MPTN architecture that provides services independent of any transport protocol. Examples include registering transport users with the MPTN address-mapper component, selecting a transport provider, and establishing MPTN connections.

Common Object Request Broker Architecture (CORBA)
An architecture and a specification for distributed object-oriented computing that separates client and server programs with a formal interface definition.

common operations services (COS)
The portion of SNA management services that pertains to the major vectors for limited remote operations control.

Common Programming Interface for Communications (CPI-C)
A call-level interface that provides a consistent application programming interface (API) for applications that use program-to-program communications. CPI-C uses LU 6.2 architecture to create a set of

interprogram services that can establish and end a conversation, send and receive data, exchange control information, and notify a partner program of errors.

common service area (CSA)
In a z/OS operating system, a part of the common area that contains data areas that can be addressed by all address spaces but is protected during its use by the key of the requester.

common storage area (CSA)
A shared region of memory.

common transport semantics (CTS)
The layer of the Networking Blueprint above the transport layer that makes the services of transport providers available to the transport user.

Common User Access architecture
Guidelines for the dialog between a human and a workstation or terminal.

communication
The process of sending or receiving data between two points of a network.

communication adapter
1. An optional hardware feature, available on certain processors, that permits communications facilities to be attached to the processors.
2. A device that allows network communication.

communication control character
See transmission control character.

communication controller
A type of communication control unit whose operations are controlled by one or more programs stored and executed in the unit. It manages the details of line control and the routing of data through a network.

communication control unit
A communication device that controls transmission of data over lines in a network.

communication identifier (CID)
In VTAM, a key for locating the control blocks that represent a session. The key is created during session establishment and deleted when the session ends.

communication line processor (CLP)
In a communication controller, the processor that manages telecommunication lines.

communication management configuration (CMC)
In VTAM, a technique for configuring a network that allows for the consolidation of many network management functions for the entire network in a single host processor.

communication management configuration host node
The type 5 host processor in a communication management configuration that does all network-control functions in the network except for controlling devices that are channel-attached to data hosts. See also data host node.

communication management host
See communication management configuration host node.

communication network management (CNM)
The process of designing, installing, operating, and managing the distribution of information and control among users of communication systems.

communication network management application program
A VTAM application program that issues and receives formatted management service request units for physical units. The NetView program is an example of a CNM application program.

communication network management interface (CNMI)
An interface that the access method provides to an application program for handling data and commands that are associated with communication systems management. CNM data and commands are handled across this interface.

communication network management processor
A program that manages one of the functions of a communications system. A CNM processor is executed under control of the NetView program.

communication port
1. On a personal computer, a serial port to which a stand-alone modem can be attached.
2. An access point for data entry or exit to or from a communication device such as a workstation.

communication scanner processor (CSP)
A processor in the 3725 Communication Controller that contains a microprocessor with a control code. The code controls transmission of data over links attached to the CSP.

communications infrastructure
In the AIX operating system, a framework of communication that consists of a postmaster, an object registration service, a startup file, communication protocols, and application programming interfaces.

Communications Server
IBM SecureWay Software that supports (a) the development and use of application programs across two or more connected systems or workstations, (b) multiple concurrent connections that use a wide range of protocols, and (c) several application programming interfaces (APIs) that may be called concurrently and that are designed for client/server and distributed application programs.

communications storage manager (CSM)
In VTAM, a buffer management technology that reduces performance overhead resulting from the movement of large amounts of data. CSM enables authorized host application programs to put data in buffers that can be addressed and accessed by other authorized host application programs without any need to copy the data.

communication vector table (CVT)
A structured communication area that contains information fields for z/OS control blocks.

community
In SNMP, the relationship between an agent and one or more managers. The community describes which SNMP manager requests the SNMP agent should honor.

community name
The part of an SNMP message that represents a password-like name and that is used to authenticate the SNMP message.

compensation
In MPTN architecture, the action of making up for differences in functions that are requested by the transport user and those provided by the transport provider.

compile
To translate all or part of a program expressed in a high-level language into a computer program expressed in an intermediate language, an assembly language, or a machine language.

compiler
A program that translates a source program into an executable program (an object program).

component
1. A reusable object or program that performs a specific function and works with other components and applications.
2. A part of a structured type or value, such as an array element or a record field.

component set
In NetDA/2, a set of nodes, transmission groups (TGs), or both.

component set expression
In NetDA/2, a user specification that defines a set of components (nodes and transmission groups).

component trace (CTRACE)
A service that provides a way for z/OS components to collect problem data about events.

composite LEN node
A type 5 node and its subordinate type 4 nodes that support LEN protocols and appear to an attached APPN or LEN node as a single LEN node.

composite network
In MPTN architecture, a single-protocol transport network made up of multiple individual networks running the same transport protocol, each with its own unique net ID.

composite network node (CNN)
A type 5 node and its subordinate type 4 nodes that support APPN network node protocols and appear to an attached APPN or LEN node as a single network node.

compound command processor
A series of commands that appear to run as a single command. The commands can have interactions with tasks in the same domain or in other domains.

compressed video
Video resulting from the process of digitally encoding and decoding a video image or segment using a variety of computer techniques to reduce the amount of data required to represent the content accurately.

compression
A function that removes repetitive characters, spaces, strings of characters,

or binary data from the data being processed and replaces characters with control characters. Compression reduces the amount of storage space that is required for data.

computerized branch exchange (CBX)
An exchange in which a central node acts as a high-speed switch to establish direct connections between pairs of attached nodes.

Computer Science Network (CSNET)
A large computer network, mostly in the United States but with international connections. CSNET sites include universities, research labs, and some commercial companies. CSNET has merged with the Because It's Time Network (BITNET) to form the Consortium for Research and Education Network (CREN).

computer word
See fullword.

concentrator
1. Any device that combines incoming messages into a single message (concentration) or extracts individual messages from the data sent in a single transmission sequence (deconcentration).
2. In data transmission, a functional unit that permits a common transmission medium to serve more data sources than there are channels currently available within the transmission medium.

concurrent server
A server that can handle many connections at the same time. It can accept new connection requests while still processing the transactions started by previous requests. See also iterative server.

conditional end bracket (CEB)
In SNA, the value (binary 1) of the conditional end bracket indicator in the request header (RH) of the last request of the last chain of a bracket; the value denotes the end of the bracket. See also end bracket.

configuration
1. The manner in which the hardware and software of a system, subsystem, or network are organized and interconnected.
2. The machines, devices, and programs that make up a system, subsystem, or network.

Configuration Application
A Systems Monitor feature that is used (a) to configure the Mid-Level Manager (MLM), the System-Level Manager (SLM), and the System Information Agent (SIA), (b) to reinitialize daemons, and (c) to control data retrieval and collection from remote nodes.

Configuration Control Program (CCP)
An IBM licensed program that is used interactively to define, display, and alter configurations that contain network controllers.

configuration file
A file that specifies the characteristics of a program, system device, system, or network.

configuration management
The control of information necessary to identify both physical and logical information systems and their relationship to one another.

configuration parameter
A variable that controls the behavior of the system or the behavior of all applications running on the system.

configuration report program (CRP)
An SSP utility program that creates a configuration report that lists the network resources and resource attributes for networks with NCP, EP, PEP, or VTAM.

configuration report server (CRS)
A function that resides on each ring in an environment of multiple token-ring networks in which configuration is being monitored. This function receives notifications about inserting and removing stations and notifications about active monitor failures.

configuration repository
1. A RIM repository that contains information stored by inventory scans and software distributions.
2. A storage area of configuration data that is typically located in a subdirectory of the product installation root directory.

configuration restart
In VTAM, the recovery facility used to restore the domain status after a failure or deactivation of VTAM, a major node, or the host processor.

configuration service
Service activating, deactivating, and maintaining the status of physical units, links, and link stations. See also session services.

configure
To describe the interconnected arrangement of the devices, programs, communications, and optional features installed on a system.

conjunction
The Boolean operation whose result has the Boolean value 1 if and only if each operand has the Boolean value 1.

connect data set to line (CDSTL)
In SNA, an option that determines how the data terminal ready (DTR) signal to the modem operates. It is used if a DTR indicates an unconditional command from the data terminal equipment (DTE) to the attached data circuit-terminating equipment (DCE) to connect to or remove itself from the network.

connected
In VTAM, pertaining to the state of a physical unit (PU) or a logical unit (LU) that has an active physical path to the host processor containing the system services control point (SSCP) that controls the respective PU or LU.

connection
1. In data communication, an association established between entities for conveying information.
2. In Open Systems Interconnection architecture, an association established by a given layer between two or more entities of the next higher layer for the purpose of data transfer.

connectionless-mode transmission
The transmission of a single unit of data from a source service access point to one or more destination service access points without establishing a connection.

connectionless protocol
In the Distributed Computing Environment (DCE), a remote procedure call (RPC) transport protocol, such as User Datagram Protocol (UDP), that does not require a connection to be established prior to data transfer.

connectionless service
A network service that treats each packet or datagram as a separate entity that contains the source address and destination address and for which no acknowledgment is returned to the originating source. Connectionless services are on a best-effort basis and do not guarantee reliable or in-sequence delivery. See also connection-oriented service.

connection network
A switched network (such as a local area network, X.25, or public-switched dial network) that allows a local node to establish APPN connections to more than one undefined adjacent node.

connection-oriented service
A service that establishes a logical connection between two partners for the duration that they want to communicate. Data transfer takes place in a reliable, sequenced manner. See also connectionless service.

connection point manager
In SNA, a component of the transmission control layer that (a) performs session-level pacing of normal-flow requests, (b) checks sequence numbers of received request units, (c) verifies that request units do not exceed the maximum permissible size, (d) routes incoming request units to their destinations in the half-session, and enciphers and deciphers FMD request units when cryptography is selected.

connectivity
1. The capability of a system or device to be attached to other systems or devices without modification.
2. An object class that is used for objects that connect different parts of the network and route or switch traffic between these parts. This class includes gateways, repeaters (including multiport repeaters), and bridges.

connectivity subsystem (CSS)
An expansion frame, such as the 3746 Model 900, that extends connectivity and enhances the performance of the IBM 3745 Communication Controller.

connector class
An object class that is used for objects that connect different parts of the network and route or switch traffic between these parts. This class includes gateways, repeaters (including multiport repeaters), and bridges. See also network class.

connect phase
An optional phase of link activation during which initial communication is established. It includes dialing and answering on switched links and can include modem equalization. The connect phase is followed by the optional prenegotiation phase or by the contact phase. See also prenegotiation phase.

console
A display station from which an operator can control and observe the system operation.

console communication service (CCS)
The SNA facility that acts as an interface between the control program and the VSCS component of VTAM for VM.

console event
An event sent by a monitor to a console.

Consortium for Research and Education Network (CREN)
A large computer network that was formed from the merging of the Because It's Time Network (BITNET) and the Computer Science Network (CSNET).

constraint
In NetDA/2, the set of essential requirements that are specified with the node, connection, or application definitions. A change in a constraint value changes the input to the network design. See also parameters.

contact phase
A phase of link activation during which negotiation-proceeding XID3s are exchanged between the connected link stations to establish the primary and secondary roles of the link stations, the TG number to be used, and other characteristics of the link, and during which the mode-setting command is sent and acknowledged after the primary and the secondary roles are established. Link activation may consist only of the contact phase, or it may also have either a connect phase or a prenegotiation phase or both preceding the contact phase. See also prenegotiation phase.

container
A software object that holds or organizes other software objects or entities.

contention
A condition on a session when two programs try to start a conversation at the same time. See also control operator.

contention-loser session
To a network accessible unit (NAU), a session for which it was defined during session initiation to be the contention loser. See also contention-winner session.

contention polarity
The role of each LU when contention occurs for use of a session. One LU is the contention winner and the other LU is the contention loser.

contention-winner session
To a network accessible unit (NAU), a session for which it was defined during session initiation to be the contention winner. See also contention-loser session.

context-sensitive help
Help information about the specific choice or object that the cursor is on. The help is contextual because it provides information about the item in its current context.

continuation mode
In VTAM, the state of a conversation or session, which is either continue-any mode or continue-specific mode.

continue-any mode
A state into which a session is placed that allows its input to satisfy a request issued in any-mode or specific mode. See also any-mode.

continue-specific mode
A state into which a session is placed that allows its input to satisfy only requests issued in specific mode.

control block
1. A storage area used by a program to hold control information.
2. In the IBM Token-Ring Network, a specifically formatted block of information provided from the application program to the Adapter Support Interface to request an operation.

control character
A character whose occurrence in a particular context initiates, modifies, or stops a control function.

control data set (CDS)
A data set containing configurational, operational, and communication information. The z/OS storage management subsystem (SMS), DFSMSrmm, and DFSMShsm use control data sets.

control desk
The Tivoli NetView interface that enables the network operator to group application instances.

control initiate (CINIT)
A network services request sent from a system services control point (SSCP) to a logical unit (LU) asking that LU to establish a session with another LU and to act as the primary end of the session.

controller
1. A device that coordinates and controls the operation of one or more input/output devices (such as workstations) and synchronizes the operation of such devices with the operation of the system as a whole.
2. See control unit.

controlling application program
In VTAM, an application program with which a secondary logical unit (other than an application program) is automatically put in session whenever the secondary logical unit is available. See also controlling logical unit.

controlling logical unit
In VTAM, a logical unit with which a secondary logical unit (other than an application program) is automatically put in session whenever the secondary logical unit is available. A controlling logical unit can be either an application program or a device-type logical unit. See also automatic logon, control logical unit, controlling application program.

control logical unit (CLU)
A logical unit that resides in a Transaction Processing Facility (TPF) type 2.1 node and that is used to pass private protocol request units between this TPF type 2.1 node and the logon manager (a VTAM application program). The communication flow between the control logical unit and the logon manager enables a logical unit controlled by VTAM to establish a session with TPF. See also controlling logical unit.

control operator
For logical unit (LU) 6.2, a service transaction program that describes and controls the availability of certain resources. For example, it describes network resources accessed by the local LU, and it controls session limits between the LU and its partners. See also contention.

control point (CP)
In APPN, a component of a node that manages resources of that node and optionally provides services to other nodes in the network. Examples are a system services control point (SSCP) in a type 5 node, a physical unit control point (PUCP) in a type 4 node, a network node control point (NNCP) in a type 2.1 (T2.1) network node, and an end node control point (ENCP) in a T2.1 end node. See also physical unit.

control point control block operation code (CPCB operation code)
Indicates the type of VTAM process that is represented by the work element.

control point management services (CPMS)
A component of a control point, consisting of management services function sets, that provides facilities to assist in performing problem management, performance and accounting management, change management, and configuration management.

control point management services unit (CP-MSU)
The message unit that contains management services data and flows between management services function sets. This message unit is in general data stream (GDS) format. See also management services unit, multiple-domain support message unit, network management vector transport.

control program (CP)
A routine, usually part of an operating system, that aids in controlling the operations and managing the resources of a computer system.

control statement
In programming languages, a statement that is used to interrupt the continuous sequential processing of programming statements. Conditional statements such as IF, PAUSE, and STOP are examples of control statements.

control station
The controlling or primary computer on a multipoint line. The control station controls the sending and receiving of data.

control unit (CU)
A device that coordinates and controls the operation of one or more input/output devices, and synchronizes the operation of such devices with the operation of the system as a whole.

control unit terminal mode (CUT mode)
An IBM protocol used for communications with an IBM 3174 or 3274 Control Unit or other appropriate interface unit. In this protocol, a program in the workstation emulates a 3278 or 3879 terminal for a user at a virtual terminal, and the interface unit is responsible for enforcing the protocol. See also distributed function terminal.

control vector
One of a general class of RU substructures that has variable length, is carried within some enclosing structure, and has a one-byte key used as an identifier.

convergence
In the Distributed Computing Environment (DCE), the degree to which the Cell Directory Service (CDS) attempts to keep all replicas of a directory consistent.

conversation
A connection between two programs over a session that allows them to communicate with each other while processing a transaction. See also session.

Conversational Monitor System (CMS)
A virtual-machine operating system that provides general interactive time sharing, problem solving, and program development capabilities.

conversation group ID
An identifier that represents a specific session between two specific LUs.

conversation-level security
See end-user verification.

converted command
An intermediate form of a character-coded command that is produced by VTAM through use of an unformatted system services definition table. The format of a converted command is fixed; the unformatted system services definition table must be constructed in such a manner that the character-coded command (as entered by a logical unit) is converted into the predefined, converted command format. See also unformatted.

Coordinated Universal Time (UTC)
The international standard of time that is kept by atomic clocks around the world.

CORBA
See Common Object Request Broker Architecture.

corrective service diskette
A diskette provided by IBM to registered service coordinators for resolving user-identified problems with previously installed software. This diskette includes program updates designed to resolve problems.

correlation activity
See event correlation.

correlator
Information that identifies a relation among things. An example is a variable field of a response that identifies the corresponding request.

COS

1. See class of service.
2. See common operations services.

country code
In X.25 communications, the 3-digit number that precedes the national terminal number in the network user address for public networks.

coupler
A device that connects a modem to a telephone network.

coupling facility (CF)
A special logical partition that provides high-speed caching, list processing, and locking functions in a sysplex.

CP

1. See control point.
2. See control program.

CPB See collection point block.

CPC See central processor complex.

CP capabilities
The level of network services provided by the control point (CP) in an APPN end node or network node. CP capabilities information is exchanged during the activation of CP-CP sessions between two nodes. A node's CP capabilities are encoded in the CP capabilities (X'12C1') GDS variable.

CPCB operation code
See control point control block operation code.

CP-CP session
In SNA, one of the parallel sessions between two control points, using LU 6.2 protocols and a mode name of CPSVCMG, on which network services requests and replies are exchanged. Each CP of a given pair has one contention-winner session and one contention-loser session with the other.

CP-CP session-capable connection
A link over which a node permits CP-CP sessions to be established.

CPI-C See Common Programming Interface for Communications.

CPMS See control point management services.

CP-MSU
See control point management services unit.

CP receive session
A CP-CP session that is also a contention-loser session. On this session, directory services in a CP receives a Locate search or registration request from a partner CP.

CP send session
A CP-CP session that is also a contention-winner session. On this session, directory services in a CP sends a Locate search or registration request to a partner CP.

CP-SVR pipe
A pair of LU 6.2 sessions, between the control points in dependent-LU-requester (DLUR) and dependent-LU-server (DLUS) nodes, that carry the flows of SSCP services, which are encapsulated in APPN formats.

CPU See central processing unit.

CRC See cyclic redundancy check.

create link pack area (CLPA)
An option that is used during initial program load to initialize the link pack pageable area.

CREN See Consortium for Research and Education Network.

cron table
A table that is used to schedule application programs and processes.

cross-domain
Pertaining to control or resources involving more than one domain. See also same-domain.

cross-domain key
In SNA, a pair of cryptographic keys that are used by a system services control point (SSCP) during the initiation of cross-domain LU-LU sessions that use session-level cryptography. The keys are used to encipher the

session cryptography key that is sent to another SSCP and to decipher the session cryptography key that is received from the other SSCP.

cross-domain link

1. A subarea link connecting two subareas that are in different domains.
2. A link physically connecting two domains.

cross-domain network manager session (CDNM session)
A session between two network managers in separate domains.

cross-domain resource (CDRSC)
A representation for a logical unit that is owned by another domain and is referenced by a symbolic name, which can be qualified by a network identifier.

cross-domain resource manager (CDRM)
In VTAM, the function in the system services control point (SSCP) that controls initiation and termination of cross-domain sessions.

cross key

cross-memory mode
A synchronous method of communication between address spaces.

cross-network
In SNA, pertaining to control or resources involving more than one network.

cross-network session
An LU-LU or SSCP-SSCP session whose path traverses more than one SNA network.

cross-system coupling facility (XCF)
A component of z/OS that provides functions to support cooperation between authorized programs running within a sysplex.

CRP See configuration report program.

CRS See configuration report server.

cryptographic
Pertaining to transformation of data to conceal meaning. See also decipher, encipher.

cryptographic algorithm
A set of rules that specify the mathematical steps required to encrypt and decrypt data.

cryptographic key
A parameter that determines a cryptographic transformation between plaintext and ciphertext.

cryptographic session
In SNA products, an LU-LU session in which a function management data (FMD) request can be enciphered before it is transmitted, and then deciphered after it is received. See also clear session, required cryptographic session, selective cryptographic session.

cryptography verification request
A request unit that is sent by the primary logical unit (PLU) to the secondary logical unit (SLU) as part of cryptographic session establishment. The request unit allows the SLU to verify that the PLU is using the correct session cryptography key and initialization vector (IV).

CSA

1. See common service area.
2. See common storage area.

CSCF See central site control facility.

CSM See communications storage manager.

CSMA/CD
See Carrier Sense Multiple Access with Collision Detection.

CSNET
See Computer Science Network.

CSP See communication scanner processor.

CSS

1. See connectivity subsystem.
2. See channel subsystem.

CSU See channel service unit.

CSW See channel status word.

CTC See channel-to-channel.

CTRACE
See component trace.

CTS

1. See clear to send.
2. See common transport semantics.

CU See control unit.

CUD See call user data.

CUG See closed user group.

current line pointer (CLP)
In systems with time sharing, a pointer that indicates the display line on which operations are being performed.

CUT mode
See control unit terminal mode.

CVT See communication vector table.

CWALL
An NCP threshold of buffer availability, below which the NCP will accept only high-priority path information units (PIUs).

cyclic redundancy check (CRC)
A redundancy check in which the check key is generated by a cyclic algorithm

cylinder
On a magnetic disk or in an assembly of disks, the set of all tracks that can be accessed by all the magnetic heads of a comb in a given position, without repositioning the access mechanism.

D

DACTLINK
See deactivate link.

DACTLU
See deactivate logical unit.

DACTPU
See deactivate physical unit.

daemon
A program that runs unattended to perform continuous or periodic functions, such as network control.

DAF See destination address field.

DARPA
See Defense Advanced Research Projects Agency.

DASD
See direct access storage device.

DASD conservation option
In Tivoli NetView for OS/390, an installation option that allows Tivoli NetView for OS/390 to be installed without the online help facility and hardware monitor data presentation panels.

data A representation of facts or instructions in a form suitable for communication, interpretation, or processing by human or automatic means. Data includes constants, variables, arrays, and character strings.

database administrator (DBA)
A person who is responsible for the design, development, operation, maintenance, and use of a database.

database record
In an IMS database, a collection of segments that contains one occurrence of the root segment type and all of its dependents arranged in a hierarchic sequence. A database record can be a physical database record or a logical database record.

data carrier detect (DCD)
A signal defined in the EIA-232 standard that indicates to the data terminal equipment (DTE) that it is receiving a signal from the remote data circuit-terminating equipment (DCE).

data chaining
An SNA protocol for transmitting a group of related messages.

data channel
See input/output channel.

data check
1. A synchronous or asynchronous indication of a condition caused by invalid data or incorrect positioning of data. Some data checks can be suppressed.
2. An operation used to verify data quality or data integrity.

data circuit
A pair of associated transmit and receive channels that provide a means of two-way data communication. See also physical circuit.

data circuit-terminating equipment (DCE)
The equipment that provides signal conversion and coding between the data terminal equipment (DTE) and the line. The DCE provides all the functions required to establish, maintain, and end a connection.

data communication
Transfer of data among functional units by means of data transmission protocols.

data compression
See compression.

data country code (DCC)
A 3-digit code, unique to each country or region, that specifies the X.21 call format used by a network in its International Data Number to call another station. See also data network identification code.

data definition name (ddname)
The name of a data definition (DD) statement that corresponds to a data control block that contains the same name.

data definition statement (DD statement)
A job control statement that is used to define a data set for use by a batch job step, started task or job, or an online user.

data dictionary
A set of tables that keep track of the structure of both the database and the inventory of database objects.

data-encrypting key
A key that is used to encipher, decipher, or authenticate data. See also key-encrypting key, session cryptography key.

Data Encryption Standard (DES)
A cryptographic algorithm designed to encrypt and decrypt data using a private key.

data flow control
In SNA, a request/response unit (RU) category used for requests and responses exchanged between the data flow control layer in one half-session and the data flow control layer in the session partner.

data flow control layer (DFC layer)
In SNA, the layer within a half-session that (a) controls whether the half-session can send or receive, or both send and receive request units (RUs) at the same time, (b) combines related RUs into RU chains, (c) defines the limits of transactions by using the bracket protocol, (d) controls the connection of requests and responses in accordance with control modes specified when the session is started, (e) creates sequence numbers, and (f) associates requests with responses.

data flow control protocol
In SNA, the sequencing rules for requests and responses by which network addressable units (NAUs) in a session coordinate and control data transfer and other operations, for example, bracket protocol.

data flow synchronous response
In VTAM, a normal-flow response that is treated as a normal-flow request so that it may be received in sequence with normal-flow requests.

datagram
A self-contained packet, independent of other packets, that carries

information sufficient for routing from the originating data terminal equipment (DTE) to the destination DTE without relying on earlier exchanges between the DTEs and the network.

Datagram Delivery Protocol (DDP)
In AppleTalk networks, a protocol that provides network connectivity by means of connectionless socket-to-socket delivery service on the internet layer.

datagram segment
A part of a datagram that is transported through a network separately from other parts of the same datagram. A datagram can be segmented if it contains too many bytes of data to send at one time.

data host
See data host node.

data host node
In a communication management configuration, a type 5 host node that is dedicated to processing applications, and does not control network resources, except for its channel-attached or communication adapter-attached devices. See also communication management configuration host node.

data integrity
The condition that exists as long as accidental or intentional destruction, alteration, or loss of data does not occur.

data link
See link.

data link connection identifier (DLCI)
The numeric identifier of a frame-relay subport or PVC segment in a frame-relay network. Each subport in a single frame-relay port has a unique DLCI.

data link control (DLC)
A set of rules used by nodes on a data link (such as an SDLC link or a token ring) to accomplish an orderly exchange of information.

data link control layer (DLC layer)
In communications, the layer that consists of the link stations that schedule data transfer over a link between two nodes and perform error control for the link. Examples of data link control are SDLC and HDLC. See also data flow control layer.

data link escape character (DLE character)
In binary synchronous communication (BSC), a transmission control character used to indicate that the next character is a control character, not a data character.

data link layer
In the Open Systems Interconnection reference model, the layer that provides services to transfer data between entities in the network layer over a communication link. The data link layer detects and possibly corrects errors that may occur in the physical layer.

data link level
In the hierarchical structure of a data station, the conceptual level of control or processing logic between high level logic and the data link that maintains control of the data link. The data link level performs such functions as inserting transmit bits and deleting receive bits; interpreting

address and control fields; generating, transmitting, and interpreting commands and responses; and computing and interpreting frame check sequences. See also packet level, physical level.

data link switching (DLSw)
A method of transporting network protocols that use an IEEE 802.2 logical link control (LLC) type 2. SNA and NetBIOS are examples of protocols that use LLC type 2. See also encapsulation.

data model
1. A logical view of the organization of data in a database.
2. A description of the organization of data in a manner that reflects the information structure of an enterprise.

data modeling
A structured set of techniques for defining and recording business information requirements. It is a depiction of the user's view of the data needs of the organization in a consistent and rigorous fashion. The data model eventually serves as the basis for translation to computer system databases.

data network
An arrangement of data circuits and switching facilities for establishing connections between data terminal equipment.

data network identification code (DNIC)
A 4-digit code that specifies the X.21 call format used by a network in its International Data Number to call another station. The first three numbers are the data country or region code, and the last number is the country or region network identifier. See also data country code.

data packet
In X.25 communications, a packet used for the transmission of user data on a virtual circuit at the DTE/DCE interface.

data service unit (DSU)
A device that provides a digital data service interface directly to the data terminal equipment. The DSU provides loop equalization, remote and local testing capabilities, and a standard EIA/CCITT interface. See also channel service unit.

data service unit/channel service unit (DSU/CSU)
A device used to connect a system to a digital communications line.

data set
The major unit of data storage and retrieval, consisting of a collection of data in one of several prescribed arrangements and described by control information to which the system has access.

data set member
A individual unit of data among a named collection of data.

data set name (dsname)
An identifier assigned to a data set.

data set ready (DSR)
In the EIA 232 standard, a signal that indicates to the data terminal equipment (DTE) that the local data circuit-terminating equipment (DCE) is connected to the communication channel and is ready to receive data.

data space
A separate area of addressable storage that contains only data. A data space can hold up to 2 gigabytes of data. See also address space.

data stream
The commands, control codes, data, or structured fields that are transmitted between an application program and a device such as printer or nonprogrammable display station.

data switching exchange (DSE)
The equipment that is installed at a single location to provide switching functions, such as circuit switching, message switching, and packet switching.

data terminal equipment (DTE)
A device on a data link that sends and receives data, and provides data communications control functions according to protocols.

data terminal ready (DTR)
A signal to the modem used with the EIA 232 protocol.

data trace
A record of the data that is sent and received on a communication link.

data traffic reset state
The state a session usually enters before the start data traffic state, and after Clear or Bind Session, if cryptography verification (CRV) is used. While a session is in this state, requests and responses for data and data flow control cannot be sent. Only certain session control requests can be sent. See also command.

data transfer rate
The average number of bits, characters, or blocks per unit time passing between corresponding equipment in a data transmission system. The rate is expressed in bits, characters, or blocks per second, minute, or hour. Corresponding equipment should be indicated; for example, modems, intermediate equipment, or source and sink.

DB2 A family of IBM licensed programs for relational database management.

DBA See database administrator.

DBCS See double-byte character set.

D-bit See delivery-confirmation bit.

DCB See device control block.

DCC See data country code.

DCD See data carrier detect.

DCE

1. See data circuit-terminating equipment.
2. See Distributed Computing Environment.

DCE cell
A group of Distributed Computing Environment (DCE) machines that work together and are administered as a unit. A cell represents a group of users, systems, and resources that typically have a common purpose and share common DCE services.

DCF See Document Composition Facility.

D-channel
See delta channel.

DCSS See discontiguous shared segment.

DD See device driver.

DDN See Defense Data Network.

ddname
See data definition name.

DDP See Datagram Delivery Protocol.

DDSA
See digital data service adapter.

DD statement
See data definition statement.

deactivate
To take a resource of a node out of service, rendering it inoperable, or to place it in a state in which it cannot perform the functions for which it was designed. See also activate.

deactivate link (DACTLINK)
In SNA, a command used to initiate link deactivation.

deactivate logical unit (DACTLU)
In SNA, a command used to initiate logical unit deactivation.

deactivate physical unit (DACTPU)
In SNA, a command used to initiate physical unit deactivation.

deallocate
To release a resource that is assigned to a specific task.

decipher
To convert enciphered data in order to restore the original data. See also cryptographic, encipher.

DECnet
A network architecture that defines the operation of a family of software modules, databases, and hardware components typically used to tie Digital Equipment Corporation systems together for resource sharing, distributed computation, or remote system configuration. DECnet network implementations follow the Digital Network Architecture (DNA) model.

decompression
The process of restoring compressed data to its original state, so that it can be used again.

decrypt
To decipher data.

decryption
In computer security, the process of transforming encoded text or ciphertext into plaintext.

dedicated channel
A channel that permanently connects two or more locations.

dedicated circuit
A circuit that is designated for exclusive use by specified users.

dedicated server
A processor on a network that functions only as a server, not as a requester and a server.

default
Pertaining to an attribute, value, or option that is assumed when none is explicitly specified.

default focal point
A focal point that provides management services support for those nodes that have not been assigned a focal point. The set of nodes in the sphere of control (SOC) of a default focal point is not defined at either the focal point itself or the SOC nodes. A default focal point exchanges management services capabilities with all network nodes known to it; only those nodes that have not established a relationship with another focal point accept the request. See also assigned focal point.

default policy
In a Tivoli environment, a set of resource property values that are assigned to a resource when the resource is created.

default SSCP list
In VTAM, a list of system services control points (SSCPs) to which a session request can be routed when an LU's owning cross-domain resource manager (CDRM) is not specified. This list is filed as part of an adjacent SSCP table in the VTAM definition library.

default SSCP selection
A VTAM function that uses the default SSCP list to select a set of one or more system services control points (SSCPs) to which a session request can be routed when an LU's owning cross-domain resource manager (CDRM) is not specified.

Defense Advanced Research Projects Agency (DARPA)
The United States Department of Defense agency responsible for creating ARPANET, a large TCP/IP network.

Defense Data Network (DDN)
The MILNET, ARPANET, and TCP/IP networks and protocols.

definite response (DR)
In SNA, a value in the response-requested field of the request header that directs the receiver of the request to return a response unconditionally, whether positive or negative, to that request. See also exception response, no response.

definition statement
In VTAM, a statement that describes an element of the network. See also keyword operand, operand, positional operand, suboperand.

definition statement identifier
A specific character string that identifies the purpose of a definition statement.

degree
1. In NetDA/2, the maximum number of attachments (such as links, Ethernet connections, or token-ring connections) that a node can have. For example, if a node can have six attachments, that node has a degree of 6.
2. The number of children of a node.

delay characteristics
The average amount of time that it takes for operations such as call setup, call clearing, and data transfer to be performed on a packet switching network.

delay compensation
In CCP, a responding arrangement by which the IBM 3710 Network Controller answers for a receiving station.

delayed-request mode
In SNA, an operational mode in which the sender may continue sending request units on the normal flow after sending a definite-response request chain on that flow, without waiting to receive the response to that chain. See also delayed-response mode. See also immediate-request mode.

delayed-response mode
In SNA, an operational mode in which the receiver of request units can return responses to the sender in a sequence different from that in which the units were sent. An exception is the response to a CHASE request, which is returned only after all responses to requests that were sent before the CHASE have been returned. See also immediate-response mode.

delimiter
1. A flag that is formed by a character or a sequence of characters to group or separate items of data by marking the beginning and end of a unit of data. The delimiter is not a part of the flagged unit of data.
2. A character, such as comma or tab, used to group or separate units of text by marking the boundary between them.

delivery-confirmation bit (D-bit)
In X.25 communications, the bit in a data packet or call-request packet that is set to 1 if end-to-end acknowledgment (delivery confirmation) is required from the recipient.

delta channel (D-channel)
In ISDN, a common channel used for signaling and management of the network. In a basic rate interface, the D-channel operates at 16 kilobits per second. In a primary rate interface, the D-channel operates at 64 kilobits per second. See also bearer channel.

DELTA disk
The virtual disk in a VM operating system that contains program temporary fixes (PTFs) that have been installed but not merged. See also BASE disk, MERGE disk.

demand-activated logical link
A logical link that can be activated by APPN configuration services when needed without requiring operator intervention.

demand poll
A polling operation initiated by the user.

dependent logical unit (DLU)
A logical unit that requires assistance from a system services control point (SSCP) to instantiate an LU-to-LU session. See also independent logical unit.

dependent LU requester (DLUR)
An APPN end node or network node that (a) owns dependent LUs in its local node or in adjacently attached nodes and (b) obtains SSCP services for these dependent LUs from a dependent LU server (DLUS) located

elsewhere in an APPN network. The flows of SSCP services between DLUR and DLUS are encapsulated in APPN formats and carried over a special pair of LU 6.2 sessions (referred to as a CP-SVR pipe).

dependent LU server (DLUS)
An APPN network node that provides SSCP services for dependent LUs owned by dependent LU requesters (DLURs) located elsewhere in an APPN network.

deployment management
The Tivoli management discipline that addresses the automation of configuration and change management activities for the ever-evolving components of a network computing system. See also availability management, operations and administration, security management.

DES See Data Encryption Standard.

designated gateway SSCP
See designated gateway VTAM.

designated gateway VTAM
A gateway system services control point (SSCP) designated to perform all the gateway control functions during LU-LU session setup.

designated router
A router that informs end nodes of the existence and identity of other routers. The selection of the designated router is based upon the router with the highest priority. When several routers share the highest priority, the router with the highest station address is selected.

desktop
A visual representation of a group of objects in a system that helps a user to interact with and perform operations on a computer system.

destination
Any point or location, such as a program, node, station, printer, or a particular terminal, to which information is to be sent. See also origin.

destination address
The location to which information is to be sent.

destination address field (DAF)
In SNA, a field in a format identification 0 or format identification 1 transmission header that contains the network address of the destination. In a format identification 2 header, the field is called destination address field prime (DAF'). See also origin address field.

destination logical unit (DLU)
A logical unit that is the target of a Locate search request as part of a session initiation sequence. See also initiating logical unit, origin logical unit.

destination node
The node to which a request or data is sent.

destination port
An 8-port asynchronous adapter that serves as a connection point with a serial service.

destination service access point (DSAP)
In SNA and TCP/IP, a logical address that allows a system to route data from a remote device to the appropriate communications support. See also source service access point.

destination subarea field (DSAF)
In SNA, the field in a network header that carries the subarea number of a data packet's destination.

device A piece of equipment such as a workstation, printer, disk drive, tape unit, or remote system.

device class
The generic name for a group of device types. For example, all display stations belong to the same device class.

device control block (DCB)
A control block that is used by access method routines in storing and retrieving data.

device control character
A control character used to specify a control function for peripheral devices associated with a system.

device-dependent
Pertaining to a function that can be accomplished, or a program that can be run, only if particular types of devices are available. See also device-independent.

device driver (DD)
A program that provides an interface between a specific device and the application program that uses the device.

device-independent
Pertaining to a function that can be accomplished, or a program that can be executed, without regard for the characteristics of particular types of devices. See also device-dependent.

device pool
A collection of similar devices that a group of users can share.

device queue
An ordered list of device requests that are routed to a device or device pool one at a time.

device-type logical unit
In VTAM, a logical unit that has a session limit of 1 and usually acts as the secondary end of a session. It is typically a logical unit (LU) in an SNA terminal, such as a 3270.

DFC layer
See data flow control layer.

DFS See Distributed File Service.

DFT See distributed function terminal.

DHCP See Dynamic Host Configuration Protocol.

dial-in
Pertaining to the direction in which a switched connection is requested by any node or terminal other than the receiving host or an NCP.

dialog

1. A series of related inquiries and responses between a user and an application, similar to a conversation between two people.
2. In AIXwindows, a two-way text interface between an application and its user. The interface takes the form of a collection of widgets and

gadgets, including a DialogShell widget, a BulletinBoard widget (or a subclass of a BulletinBoard widget or some other container widget), plus various children, including Label, PushButton, and Text widgets.

dialog box
A secondary window that solicits user input for a specific task or subtask. Common examples are the Print and Save As dialog boxes. Dialog boxes are modal; that is, they must be closed before the user can continue working in the window that launched the dialog box.

dial-out
Pertaining to the direction in which a switched connection is requested by a host or an NCP.

digital Pertaining to data in the form of digits. See also analog.

digital certificate
An electronic document used to identify an individual, a system, a server, a company, or some other entity, and to associate a public key with the entity. A digital certificate is issued by a certification authority and is digitally signed by that authority.

digital data service adapter (DDSA)
In data communications, a device used when sending and receiving data using a nonswitched digital data service.

Digital Intel Xerox protocol
A network protocol for Ethernet communications that was developed by Digital Equipment Corporation, Intel Corporation, and Xerox.

Digital Network Architecture (DNA)
The model for all DECnet hardware and software implementations.

digital signature
Information that is encrypted with a private key and is appended to a message or object to assure the recipient of the authenticity and integrity of the message or object. The digital signature proves that the message or object was signed by the entity that owns, or has access to, the private key or shared-secret symmetric key.

Digital Video Interactive (DVI)
An integrated video, audio, and graphics technology allowing all forms of data (full motion video, still images, graphics, and text) to be displayed from any digital source. DVI allows real-time compression and decompression as well as display of digital graphics and full-motion video with audio.

Dijkstra's algorithm
See Shortest Path First.

direct access storage
A type of storage where information is stored or retrieved directly, without prior sequential searching. See also random access memory.

direct access storage device (DASD)
A device that allows storage to be directly accessed, such as a disk drive. See also random access memory.

direct activation
In VTAM, the activation of a resource as a result of an activation command that specifically names the resource. See also automatic activation, indirect activation.

direct call facility
A facility that permits calling without requiring the user to provide address selection signals; the network interprets the call request signal as an instruction to establish a connection to one or more predetermined data stations.

direct deactivation
In VTAM, the deactivation of a resource as a result of a deactivation command that specifically names the resource. See also automatic deactivation.

directed Locate search
See directed search.

directed search
A search request that is sent to a specific destination node. A directed search is used to verify the continued existence of the resource, and to obtain the routing information specific to the node.

direct memory access (DMA)
The transfer of data between memory and an input/output device without processor intervention.

directory
1. A file that contains the names and controlling information for objects or other directories.
2. In VM, a Control Program (CP) disk file that defines each virtual machine's typical configuration, including the user ID, password, dispatching priority, and other information.
3. A table of identifiers and references to the corresponding items of data.

directory service
1. In APPN, a component that is responsible for maintaining a directory of SNA logical units, along with information about those LUs' locations and availability.
2. A component that provides naming, object storage, and lookup capabilities to other components.

direct routing
In Internet communications, the transmission of an Internet Protocol (IP) datagram when the destination and the source reside on the same IP network or IP subnet.

direct search list (DSRLST)
A message unit that contains a search request that is sent throughout subarea networks to obtain information about a network resource (such as its name, routing information, and status information).

disable
To disconnect or stop a subsystem.

discontiguous shared segment (DCSS)
An area of virtual storage outside the address range of a virtual machine. It can contain read-only data or reentrant code. It connects discontiguous segments to a virtual machine's address space so programs can be fetched.

discovery
The automatic detection of a network topology change, for example, new and deleted nodes or links.

discriminator
An object that enables a system to select operations and event reports related to other managed objects. See also event forwarding discriminator.

disjoint
See node disjoint.

disjoint network
In a network, two or more subnetworks with the same network identifier that are indirectly connected. For example, through an SNA network interconnection.

disk drive
The mechanism used to read and write information on a disk.

diskette
A thin, flexible magnetic plate that is permanently sealed in a protective cover. It can be used to store information copies from the disk or another diskette.

disk operating system (DOS)
An operating system for computer systems that use disks and diskettes for auxiliary storage of programs and data.

display level
See display type.

display panel
In computer graphics, a predefined display image that defines the locations and characteristics of display fields on a display surface.

display station
A device, usually equipped with a keyboard and a display device, capable of sending and receiving information over a communications line. See also workstation.

display station pass-through (DSPT)
A communications function that allows a user to sign on to one system (such as a System i, a System/38, or a System 36 system) from another system (such as a System i, a System/38, or a System 36 system) and use that system's programs and data.

display type
In Tivoli NetView for OS/390, one of the three elements, which also include data type and resource type, that are used to describe the organization of panels. Display types include total, most recent, user action, and detail.

distinguished name
In Open System Interface (OSI), a multipart hierarchical name that can be used to identify OSI objects globally. The distinguished name of an object is formed from the sequence of its relative distinguished names (RDNs) and the name of its superior object.

distributed computing
A method of computing in which large problems are divided into small tasks that are distributed across a network for simultaneous processing. Individual results are then brought together to form the total solution.

Distributed Computing Environment (DCE)
In network computing, a set of services and tools that supports the

creation, use, and maintenance of distributed applications across heterogeneous operating systems and networks.

distributed directory database
The complete listing of all the resources in the network as maintained in the individual directories scattered throughout an APPN network. Each node has a piece of the complete directory, but it is not necessary for any one node to have the entire list. Entries are created, modified, and deleted through system definition, operator action, automatic registration, and ongoing network search procedures.

Distributed File Service (DFS)
A service that provides data access over IP networks.

distributed function mode
See distributed function terminal.

distributed function terminal (DFT)
1. A workstation that performs operations previously accomplished by the processing unit, such as managing data links, controlling devices, and formatting data.
2. A protocol used for communication between a terminal and an IBM control unit that supports multiple, concurrent, logical, terminal sessions.

distributed management environment (DME)
A specification of the Open Software Foundation (OSF) for managing open systems.

distributed network directory
See distributed directory database.

distributed print system
A computer system that interchanges print data across different computing environments, allowing data to be printed on a system other than the one that the print request was generated. For example, in host-to-LAN distributed printing, data that resides on the host is printed on printers attached to a local area network (LAN).

distributed processing
Processing in which resources or functions are dispersed among two or more interconnected processors, typically over a network.

Distributed Protocol Interface (DPI)
An extension to the Simple Network Management Protocol (SNMP) agent that permits users to dynamically add, delete, or replace management variables in the local Management Information Base (MIB) without requiring recompilation of the SNMP agent.

Distributed Protocol Interface API (DPI API)
In the Simple Network Management Protocol (SNMP), a program interface for a subagent that provides an extension to the function provided by the SNMP agent.

distributed workstation
A workstation on which jobs and job streams are run using the distributed engine. See also workstation.

distributing host
The designated contact (point of entry) for a sysplex. The distributing host

is the normal owner of the IP address that clients in the network use to connect to the sysplex. See also backup host.

DIX protocol
See Digital Intel Xerox protocol.

DLC See data link control.

DLCI See data link connection identifier.

DLC layer
See data link control layer.

DLE character
See data link escape character.

DLL See dynamic link library.

DLSw See data link switching.

DLU

1. See dependent logical unit.
2. See destination logical unit.

DLUR See dependent LU requester.

DLUS See dependent LU server.

DM See NetView Distribution Manager.

DMA See direct memory access.

DME See distributed management environment.

DNA See Digital Network Architecture.

DNIC See data network identification code.

DNS

1. See Domain Name System.
2. See domain name server.

Document Composition Facility (DCF)
An IBM licensed program used to format input to a printer.

Document Printing Application (DPA)
An OSI standard (ISO/IEC 10175) that addresses those aspects of document processing that enable users in a distributed open systems environment to send electronic documents to shared, possibly geographically-dispersed, printers.

document type
The type of data in a particular Printing Systems Manager (PSM) document. For example, a print file document contains only printable data, and a print resource document contains only data such as fonts or form definitions that are not printable.

document type definition (DTD)
The rules that specify the structure for a particular class of SGML or XML documents. The DTD defines the structure with elements, attributes, and notations, and it establishes constraints for how each element, attribute, and notation can be used within the particular class of documents.

domain

1. A logical grouping of resources in a network for the purpose of common management and administration.
2. In communications, the network resources under control of a particular system services control point (SSCP).

domain name
In Internet communications, a name of a host system. A domain name consists of a sequence of subnames that are separated by a delimiter character, for example, www.ibm.com. See also Domain Name System.

domain name server (DNS)
A server program that supplies name-to-address conversion by mapping domain names to IP addresses.

Domain Name System (DNS)
The distributed database system that maps domain names to IP addresses. See also domain name, name resolution.

domain operator
In a multiple-domain network, the person or program that controls operation of resources controlled by one system services control point (SSCP). See also network operator.

domain search
A search that is initiated by a network node to all its authorized client APPN end nodes when it receives a search request for which it has no entry in its database.

DOS See disk operating system.

DOS partition
In the NetView/PC program, a separate area of memory in which NetView/PC programs and other DOS programs can be serially executed.

dotted decimal notation
The syntactical representation for a 32-bit integer that consists of four 8-bit numbers written in base 10 and separated by dots. IP addresses are represented in dotted decimal notation. See also octet.

double-byte character session
A display station operating session that uses double-byte character data for the system to communicate with the operator.

double-byte character set (DBCS)
A set of characters in which each character is represented by 2 bytes. These character sets are commonly used by national languages, such as Japanese and Chinese, that have more symbols than can be represented by a single byte. See also single-byte character set.

double-precision
Pertaining to the use of two computer words to represent a number in accordance with the required precision.

double recording
The recording of certain individual events under two resource levels.

doubleword
A contiguous sequence of bits or characters that comprises two computer words and is capable of being addressed as a unit. See also halfword.

download
To transfer data from a computer to a connected device, such as a workstation or personal computer.

downstream
Pertaining to the direction of data flow, which is toward the destination of a transmission.

downstream device
For the IBM 3710 Network Controller, a device that is located in a network so that the 3710 is positioned between the device and a host.

downstream line
For the IBM 3710 Network Controller, a telecommunication line that attaches a downstream device to a 3710.

Downstream Load Utility (DSLU)
A licensed program that uses the communication network management (CNM) interface to support the load requirements of certain type 2 physical units, such as the IBM 3644 Automatic Data Unit and the IBM 8775 Display Terminal.

downtime
The time during which a functional unit cannot be used because of a fault within the functional unit or within the environment.

DPA See Document Printing Application.

DPI See Distributed Protocol Interface.

DPI API
See Distributed Protocol Interface API.

DR

1. See definite response.
2. See dynamic reconfiguration.

drag To use a pointing device to move an object. For example, a user can drag a window border to make it larger by holding a button pointing device while moving the pointing device.

drain To honor pending allocation requests before deactivating sessions with a partner logical unit. This applies to LU 6.2 only.

DRDS See dynamic reconfiguration data set.

drive A data storage device. A drive can be either a magnetic disk drive or a solid-state drive (SSD).

drive designation
A letter (from A to Z) that an operating system assigns to a disk, a partition, or a network directory to give the system a unique way to refer to the resource.

driver See device driver.

drop

1. The delayed connection of a program to a routine until load time or run time.
2. A partition configured at the time of program execution according to the storage requirements of the application program or program to which the partition is allocated.

DS See directory service.

DSAF See destination subarea field.

DSAP See destination service access point.

DSE See data switching exchange.

DSECT
See dummy control section.

DSLU See Downstream Load Utility.

dsname
See data set name.

DSPT See display station pass-through.

DSR See data set ready.

DSRLST
See direct search list.

DSU See data service unit.

DSU/CSU
See data service unit/channel service unit.

DTD See document type definition.

DTE See data terminal equipment.

DTE/DCE interface
The physical interface and link access procedures between a data terminal equipment (DTE) and a data circuit-terminating equipment (DCE).

DTR See data terminal ready.

dual filter
A filter that identifies two endpoints from which to deny or allow traffic.

dummy control section (DSECT)
A control section that an assembler can use to format an area of storage without producing any object code.

dump

1. Data that is copied in a readable format from main or auxiliary storage to an external medium such as tape, diskette, or printer.
2. To record or copy, at a particular instant, data from one storage device onto another storage device to protect the data and debug the program.
3. To copy the contents of all or part of visual storage for the purpose of collecting error information.

duplex
Pertaining to communication in which data can be sent and received at the same time. See also half-duplex.

DVI See Digital Video Interactive.

DVIPA
See dynamic VIPA.

dynamic

1. Pertaining to an operation that occurs at the time it is needed rather than at a predetermined or fixed time. See also static.
2. In programming languages, pertaining to properties that can only be established during the execution of a program; for example, the length of a variable-length data object is dynamic.

dynamic application program
See replicated application program.

Dynamic Host Configuration Protocol (DHCP)
A communications protocol that is used to centrally manage configuration information. For example, DHCP automatically assigns IP addresses to computers in a network.

dynamic linking
The delayed connection of a program to a routine until load time or run time.

dynamic link library (DLL)
A file containing executable code and data bound to a program at load time or run time, rather than during linking. The code and data in a DLL can be shared by several applications simultaneously.

dynamic LPDA
A function that enables a NetView application to set or query the Link Problem Determination Aid (LPDA) status for a link or station.

dynamic partition
A partition configured at the time of program execution according to the storage requirements of the application program or program to which the partition is allocated.

dynamic path update
The process of changing the network path for sending information without regenerating complete configuration tables.

dynamic priority
The priority of a process that is varied by the operating system.

dynamic reconfiguration (DR)
The process of changing the network configuration (peripheral PUs and LUs) without regenerating complete configuration tables or deactivating the affected major node. See also dynamic reconfiguration data set.

dynamic reconfiguration data set (DRDS)
In VTAM, a data set used for storing definition data that can be applied to a generated communication controller configuration at the operator's request, or can be used to accomplish dynamic reconfiguration of NCP, local SNA, and packet major nodes. A dynamic reconfiguration data set can be used to dynamically add PUs and LUs, delete PUs and LUs, and move PUs. It is activated with the VARY DRDS operator command. See also dynamic reconfiguration.

dynamic resource allocation
An allocation technique in which the resources assigned for execution of computer programs are determined by criteria applied at the moment of need.

dynamic routing
The automatic routing of a service request, a message, or an event that is based on conditions at the time of the routing.

dynamic routing protocol
A protocol that adjusts automatically to network topology or traffic changes.

dynamic switched definition
In VTAM, the representation of a switched device that is not previously defined to VTAM.

dynamic threshold alteration
The process that enables a network operator to dynamically change the traffic count and temporary error threshold values associated with SDLC and BSC devices in communication controllers and network controllers.

dynamic threshold query
The process that enables a network operator to query the current settings of a traffic count or temporary error threshold value associated with an SDLC or BSC device in a communication controller or network controller.

dynamic VIPA (DVIPA)
A function that allows the system to move IP addresses in event of an application, TCP/IP stack, or LPAR failure.

dynamic VPN
A virtual private network that requires a separate server to support the exchange of the keys that are used to encrypt data at each end point.

dynamic XCF link
A link that uses the cross-system coupling facility that can be automatically generated any time TCP/IP becomes active within a sysplex.

E

early token release
A function, supported by token-ring adapter types 2 and 3, that allows a transmitting station to release the token after transmitting the ending delimiter.

EBCDIC
See Extended Binary Coded Decimal Interchange Code.

EBN See extended border node.

ECB See event control block.

ECF See Enhanced Connectivity Facility.

echo

1. In computer graphics, the immediate notification of the current values provided by an input device to the operator at the display console.
2. In word processing, to print or display each character or line as it is typed.
3. In data communication, a reflected signal on a communication channel. An echo verifies the accuracy of the signal.

echo check
A method of checking the accuracy of the transmission of data in which the received data is returned to the sending end for comparison with the original data. (A)

ED See enciphered data.

EE See Enterprise Extender.

EFD See event forwarding discriminator.

EGP See Exterior Gateway Protocol.

EHLLAPI
See emulator high-level language application programming interface.

EIA See Electronic Industries Alliance.

EIA communication adapter
A communication adapter that conforms to EIA standards that can combine and send information on two lines at speeds up to 19.2 kbps.

Electronic Industries Alliance (EIA)
An organization of electronics manufacturers that advances the technological growth of the industry, represents the views of its members, and develops industry standards.

element address
In SNA, a value in the element field of the network address that identifies a specific resource within a subarea. See also subarea address.

EMS See event management services.

emulation mode
The function of a network control program that enables it to emulate a transmission control unit. See also network control mode.

emulation program (EP)
A control program that permits functions written for one system or device to be run on another system or device. See also network control program.

emulator high-level language application programming interface (EHLLAPI)
An application programming interface that provides programming access to the area in computer memory that corresponds to the user's screen image (this area in memory is known as the "presentation space").

EN See end node.

enabled

1. Pertaining to the state in which a communication device can accept incoming calls on a line.
2. Pertaining to a state of the processing unit that allows the occurrence of certain types of interruptions.
3. In VTAM, pertaining to a logical unit (LU) that has indicated to its system services control point (SSCP) that it is ready to establish LU-LU sessions. The LU can separately indicate whether this prevents it from acting as a primary logical unit (PLU) or a secondary logical unit (SLU). See also inhibited.

enabled CP
The view of a control point of a partner control point (CP) when both parallel CP-CP sessions between the pair are active and ready for exchange of network services requests and replies.

encapsulation
In communication, a technique used by layered protocols by which a layer adds control information to the protocol data unit (PDU) from the layer it supports. In this respect, the layer encapsulates the data from the supported layer. In the Internet suite of protocols, for example, a packet would contain control information from the physical layer, followed by control information from the network layer, followed by the application protocol data. See also data link switching.

encipher
See encrypt.

enciphered data (ED)
The encryption of data so that its meaning is concealed from unauthorized users or observers.

encode
To convert data by the use of a code in such a manner that reconversion to the original form is possible.

ENCP See end-node control point.

encrypt
To systematically scramble information so that it cannot be read without the coding key. See also decrypt.

encryption
In computer security, the process of transforming data into an unintelligible form in such a way that the original data either cannot be obtained or can be obtained only by using a decryption process.

end bracket
In SNA, the value (binary 1) of the end bracket indicator in the request header (RH) of the first request of the last chain of a bracket; the value denotes the end of the bracket. See also begin bracket, bracket, conditional end bracket.

end node (EN)
In SNA, a node in an APPN network that can be a source or target node, but does not provide any routing or session services to any other node.

end-node control point (ENCP)
A control point that provides its own configuration, session, and management services with assistance from the control point in its serving network node. An ENCP is capable of engaging in CP-CP sessions with other nodes.

end-of-transmission character (EOC character, EOT character)
A transmission control character used to indicate the conclusion of a transmission that may have included one or more texts and any associated message headings.

end-of-transmission code (EOT code)
The character or sequence of characters that indicates termination of sending.

endpoint node
See peripheral node.

endpoint TG vector
A pair of control vectors representing a transmission group (TG) available at an end node for use by sessions that terminate in the node.

end-user verification
For logical unit (LU) 6.2, checking the identification of users by means of identifiers and passwords on attach function-management headers (FMHs).

Enhanced Connectivity Facility (ECF)
A set of programs that allows a user to access IBM-supplied servers or to create servers.

Enhanced X-Windows Toolkit
In the AIX operating system, a collection of basic functions for developing a variety of application environments. See also AIXwindows Toolkit, X Window System.

Enterprise Extender (EE)
An extension of SNA High Performance Routing that provides encapsulation of SNA application traffic within UDP frames.

Enterprise Systems Connection (ESCON)
A peripheral interface for an Enterprise Systems Architecture/390 and zSeries computer. The I/O interface uses ESA/390 logical protocols over a serial interface that configures attached units to a communication fabric.

entity A person, object, or concept about which information is stored.

entry field
An area on a display where a user can enter information, unless the field is read-only. The boundaries of an entry field are usually indicated.

entry point
The address or label of the first instruction processed or entered in a program, routine, or subroutine.There might be a number of different entry points, each corresponding to a different function or purpose.

envelope
A string of data representing information about a message aside from the attachments and its recipients.

Environmental Record Editing and Printing (EREP)
The program that formats and prepares reports from the data contained in the error recording data set.

environment variable
A variable that specifies how an operating system or another program runs, or the devices that the operating system recognizes.

EOC character
See end-of-transmission character.

EOT character
See end-of-transmission character.

EOT code
See end-of-transmission code.

EP See emulation program.

ephemeral port number
In some TCP/IP implementations, a temporary port number that is assigned to a process for the duration of a call. Ephemeral port numbers are typically assigned to client processes that must provide servers with a client port number so that the server can respond to the correct process.

ER

1. See exception response.
2. See explicit route.

EREP See Environmental Record Editing and Printing.

ERP See error recovery procedure.

error A discrepancy between a computed, observed, or measured value or condition and the true, specified, or theoretically correct value or condition.

error log
A data set or file that is used to record error information about a product or system.

error record template
In the AIX operating system, a template that describes the error class, error type, error description, probable causes, recommended actions, and failure data for an error log entry.

error recovery procedure (ERP)
A procedure designed to help isolate and, where possible, to recover from errors in equipment. The procedure is often used in conjunction with programs that record information on machine malfunctions.

error-to-traffic (E/T)
The number of temporary errors compared to the traffic that is associated with a resource.

ESCD See ESCON Director.

ESCON
See Enterprise Systems Connection.

ESCON channel
A channel that has an Enterprise Systems Connection channel-to-control-unit I/O interface that uses optical cables as a transmission medium. See also ESCON channel.

ESCON Director (ESCD)
A class of devices that connect channels and control units only for the duration of an input/output (I/O) operation.

ESCON processor (ESCP)
A processor within a connectivity subsystem (CSS) that performs ESCON functions.

ESCP See ESCON processor.

ESTAE
See extended specify task abnormal exit.

E/T See error-to-traffic.

Ethernet
A packet-based networking technology for local area networks (LANs) that supports multiple access and handles contention by using Carrier Sense Multiple Access with Collision Detection (CSMA/CD) as the access method. Ethernet is standardized in the IEEE 802.3 specification. See also local area network.

Ethernet-type LAN
A local area network that uses either the Ethernet Version 2 or IEEE 802.3 protocol.

event An occurrence of significance to a task or system. Events can include completion or failure of an operation, a user action, or the change in state of a process. See also alert, event report, message.

event adapter
Software that converts events into a format that the Tivoli Enterprise Console product can use and forwards the events to the event server.

event card
In Tivoli NetView, a graphical representation, resembling a card, of the information contained in an event.

event class
In the Tivoli Enterprise Console product, a graphical user interface that enables system administrators to view and respond to dispatched events from the event server.

event console
In the Tivoli Enterprise Console product, a graphical user interface that enables system administrators to view and respond to dispatched events from the event server.

event control block (ECB)
A control block used to represent the status of an event.

event correlation
The process of analyzing event data to identify patterns, common causes, and root causes. Event correlation analyzes the incoming events for predefined states, using predefined rules, and against predefined relationships.

event forwarding discriminator (EFD)
A managed object that describes the criteria used to select which event reports are sent and to whom they are sent. See also discriminator.

event group
A set of events that meet certain criteria defined by event group filters, which include constraints that are expressions that define the filter conditions. Event console operators can monitor event groups that are relevant to their specific areas of responsibility.

event management services (EMS)
In Tivoli NetView, a centralized method of generating, receiving, routing, and logging network events.

event manager
In Tivoli NetView for OS/390, the component that receives alert and resolution major vectors, translates these major vectors into generic event records, and applies the event status to the resource defined in the Resource Data Manager cache.

event report
The unsolicited report that an event has occurred. In an Open Systems Interconnection (OSI) context, when a managed object emits a notification, the agent uses one or more event forwarding discriminators (EFDs) to find the destinations to which the report is sent. See also event.

event server
A server to which other servers can send events for logging. The event server routes the events to any receivers that are enabled for the sending server's events.

event sieve
In Tivoli NetView, an object that is managed by the ovesmd daemon, which is the event sieve agent.

event specifier
In the Tivoli Enterprise Console, a primitive that is used in searching for events in the event cache.

exception
A condition or event that cannot be handled by a normal process.

exception request (EXR)
In SNA, a request that replaces another request in which an error was detected.

exception response (ER)
In SNA, a value in the form-of-response-requested field of the request

header that directs the receiver of the request to return a response only if the request is unacceptable as received or if the request cannot be processed; that is, only a negative response can be returned. See also definite response, no response.

exchange identification (XID)
A specific type of basic link unit that is used to convey node and link characteristics between adjacent nodes. XIDs are exchanged between link stations before and during link activation to establish and negotiate link and node characteristics, and after link activation to communicate changes in these characteristics.

exclusive set
In Remote Operations Service (ROPS), an option that indicates whether only the commands in the command list can be processed by ROPS or none of the commands in the command list can be processed by ROPS.

exclusive submap
In Tivoli NetView, a submap that is created by an application program that wants the exclusive right to control what happens in the application plane of the submap.

exec
1. In a VM operating system, a user-written command file that contains CMS commands, other user-written commands, and execution control statements, such as branches.
2. To overlay the current process with another executable program. See also fork.

executable symbol
In Tivoli NetView, a symbol defined such that double-clicking on it causes an application program to perform an action on a set of target objects. See also explodable symbol.

execution target
A client on which a job or other activity is performed. For example, if an application is being installed on a particular server, that server is the execution target for the installation activity.

exit list
A list of subroutines that receive control from the base operating system when a particular process ends, either normally or abnormally.

exit program
See exit routine.

exit routine
A program that receives control from another program to perform specific functions.

expedited flow
In SNA, a data flow designated in the transmission header (TH) that is used to carry network control, session control, and various data flow control request/response units (RUs); the expedited flow is separate from the normal flow (which carries primarily end-user data) and can be used for commands that affect the normal flow. See also normal flow.

explicit command
A command that is used to request the display of information that the user would otherwise obtain by navigating through a hierarchy of panels.

explicit focal point
An assigned focal point for which the set of nodes to be included in its sphere of control is defined locally. An explicit focal point initiates the management services capabilities exchange that brings a node into its sphere of control. See also implicit focal point.

explicit pool
A pool of workstation or printer LUs that Communications Server uses to satisfy connection requests that specify a particular device name. See also implicit pool.

explicit route (ER)
In SNA, a series of one or more transmission groups that connect two subarea nodes. An explicit route is identified by an origin subarea address, a destination subarea address, an explicit route number, and a reverse explicit route number. See also path, route extension, virtual route.

explicit route length
In SNA, the number of transmission groups in an explicit route.

explodable symbol
In Tivoli NetView, a symbol defined such that double-clicking on it or dragging and dropping it displays the child submap of the parent object that the symbol represents. See also executable symbol.

explorer frame
See explorer packet.

explorer packet
In LANs, a packet that is generated by the source host and that traverses the entire source routing part of a LAN, gathering information on the possible paths available to the host.

export/import
In Tivoli Software Distribution, a feature that enables a Tivoli administrator to save (export) a file package definition as a text file, to edit the keywords and lists in the definition, and to retrieve (import) the definition from the text file to set the properties for the file package.

EXR See exception request.

extended architecture (XA)
An extension to System/370 architecture that takes advantage of continuing high performance enhancements to computer system hardware.

Extended Binary Coded Decimal Interchange Code (EBCDIC)
A coded character set of 256 8-bit characters developed for the representation of textual data. See also American Standard Code for Information Interchange.

extended bind
A bind request that includes the Fully Qualified Procedure Correlation Identifier (FQPCID) control vector.

extended border node (EBN)
A border node that interconnects (a) APPN networks having different network identifiers or (b) separate partitions of the same APPN network, where the partitioning is to allow isolated topology subnetworks (or clusters). An extended border node supports intermediate network routing, allowing it to support LU-LU sessions that do not terminate in its native network. See also peripheral border node.

extended character
A character other than a 7-bit ASCII character. An extended character can be a 1-byte code point with the eighth bit set (ordinal 128 through 255).

extended MCS console
In MVS, a console other than a multiple console support (MCS) console from which operators or programs can issue MVS commands and receive messages.

extended network addressing
The network addressing system that splits the address into an 8-bit subarea and a 15-bit element portion. The subarea portion of the address is used to address host processors or communication controllers. The element portion is used to permit processors or controllers to address resources.

extended recovery facility (XRF)
A facility that minimizes the effect of failures in z/OS, VTAM, the host processor, or high-availability applications during sessions between high-availability applications and designated terminals. This facility provides an alternative subsystem to take over sessions from the failing subsystem.

extended specify task abnormal exit (ESTAE)
A z/OS macro that provides recovery capability and gives control to the user-specified exit routine for processing, diagnosing an abend, or specifying a retry address.

extended subarea addressing (XSA)
A network addressing system that is used in a network with more than 255 subareas.

exterior gateway
In Internet communications, a gateway on one autonomous system that communicates with another autonomous system. See also interior gateway.

Exterior Gateway Protocol (EGP)
The mechanism that allows the exterior gateway of an autonomous system to share routing information with exterior gateways on other autonomous systems. See also Border Gateway Protocol.

external communication adapter (XCA)
A communication adapter that is part of a device other than the host processor. See also integrated communication adapter.

External Data Representation (XDR)
A standard developed by Sun Microsystems, Incorporated to represent data in machine-independent format. Because XDR is a vendor-independent method for representing the data, new computer architectures can be integrated into the network without requiring the updating of translation routines.

external PVC segment
In NCP, a permanent virtual circuit (PVC) segment between two frame-relay subports in adjacent NCPs. When the two NCPs are directly attached, the two subports have the same data link connection identifier (DLCI).

F

facilities field
In an X.25 packet switching data network, an optional field used by the data terminal equipment (DTE) to convey information about the call to the network.

facsimile machine (fax machine)
A functional unit that converts images to signals for transmission over a telephone system or that converts received signals back to images.

fan-out
In communications, the process of creating copies of a distribution to be delivered locally or to be sent through the network.

Fast Ethernet
An Ethernet standard that provides a data rate of 100 Mbps.

FASTRUN
An option with the NCP/EP definition facility (NDF) that indicates that only the syntax is to be checked in generation definition statements.

fast select
In X.25 communications, an optional facility that allows inclusion of data in call-request and clear-request packets.

FAT See file allocation table.

fault A condition that causes a component in an implementation model to fail. A fault is the root cause of one or more defects identified by observing one or more failures.

fault domain
In the IBM Token-Ring Network problem determination, the portion of a ring that is involved with an indicated error.

fault management
The process of detecting and managing abnormal network or system behavior.

fax machine
See facsimile machine.

F-coupler
See frequency coupler.

FCS See frame check sequence.

FDDI See Fiber Distributed Data Interface.

FDX See full duplex.

feature
Part of a product that is either included with the product or can be ordered separately.

feature group
A group of functions that are installed at the user's option.

feedback information
In VTAM, information that is placed in certain RPL fields when an RPL-based macroinstruction is completed.

FEP See front-end processor.

FFST See First Failure Support Technology.

FH See frame handler.

FHSP See frame handler subport.

Fiber Distributed Data Interface (FDDI)
An American National Standards Institute (ANSI) standard for a 100 Mbps LAN using fiber optic cables.

fiber optic network
A network based on the technology and standards that define data transmission using cables of glass or plastic fibers carrying light. The advantages of a fiber optic network are higher transmission speeds, greater carrying capacity, lower error rates, and lighter, more compact cables that are less susceptible to electromagnetic interference.

fiber optics
The technology of guiding optical power (or light) through thin, transparent strands (or fibers) that are made of glass, fused silica, or plastic.

Fibre Channel connection (FICON)
A Fibre Channel communication protocol designed for IBM mainframe computers and peripherals.

FIC See first-in-chain.

FICON
See Fibre Channel connection.

FID field
See format identification field.

field An area into which a particular category of data or control information is entered.

field-formatted
Pertaining to a request or response that is encoded into fields, each having a specified format such as binary codes, bit-significant flags, and symbolic names. See also unformatted, unformatted, unformatted system service.

field-formatted request
In SNA, a request that is encoded into fields, each having a specified format such as binary codes, binary counts, bit-significant flags, and symbolic names. A format indicator in the request/response header (RH) for the request is set to zero.

field registration file (FRF)
A file that is used to define fields for use in the object database.

field-replaceable unit (FRU)
An assembly that is replaced in its entirety when any one of its components fails.

FIFO See first-in first-out.

file A collection of related data that is stored and retrieved by an assigned name.

file allocation table (FAT)
A table that is used to allocate space on a disk for a file and to locate the file.

file name substitution
In the AIX operating system, the process in which the shell substitutes an alphabetically sorted list of file names in the place of a pattern. The shell recognizes a pattern (as opposed to a file name) by the occurrence of a word (character string) with either of the following characteristics: (a) the word contains any of these characters: *, ?, [, or {, (b) the word begins with this character: .

file package
See software package.

file package block (fpblock)
A file or set of files that can be included in a particular software deployment. Examples include an installation package, installation files for a patch downloaded from the vendor's Web site, or a software image.

file server
The full identifier for a file, which includes its drive designation, path, file name, and file extension (for example, C:\PATH\FILENAME.EXT). The format is dependent on the storage medium of the file.

file spec
See file specification.

file specification (file spec)
The full identifier for a file, which includes its drive designation, path, file name, and file extension (for example, C:\PATH\FILENAME.EXT). The format is dependent on the storage medium of the file.

file transfer
The transfer of one or more files from one system to another over a data link.

file transfer, access, and management (FTAM)
The OSI standard for transferring files between nodes.

File Transfer Protocol (FTP)
In TCP/IP, an application layer protocol that uses TCP and Telnet services to transfer bulk-data files between machines or hosts.

filter A device or program that separates data, signals, or material in accordance with specified criteria. See also IP filter, recording filter.

filter editor
In Tivoli NetView, a part of the graphical user interface that enables the user to define, modify, and delete filtering rules for use by application programs.

FIN The SWIFT store-and-forward message-processing service defining message standards and protocols.

finger In Internet communications, a program that displays information about the current users of a local or remote system. The finger usually displays the user's full name, last login time, idle time, terminal line, and terminal location (where applicable).

finite state machine (FSM)
The theoretical base describing the rules of a service request state and the conditions to state transitions.

firewall
A network configuration, typically both hardware and software, that prevents unauthorized traffic into and out of a secure network.

first failure data capture
A problem diagnosis aid that identifies errors, gathers and logs information about these errors, and returns control to the affected runtime software.

First Failure Support Technology (FFST)
An IBM architecture that defines a single approach to error detection through defensive programming techniques. These techniques provide proactive (passive until required) problem recognition and a description of diagnostic output required to debug a software problem.

first-in-chain (FIC)
A request unit (RU) whose request header (RH) begin chain indicator is on and whose RH end chain indicator is off. See also RU chain.

first-in first-out (FIFO)
A queuing technique in which the next item to be retrieved is the item that has been in the queue for the longest time. See also last-in first-out.

first speaker
In SNA, the logical unit (LU) half-session defined when the session is started as the half-session able to begin a bracket without requesting permission from the other LU half-session to do so, and the half-session winning permission if both half-sessions attempt to begin a bracket simultaneously. See also bidder.

first-speaker session
See contention-winner session.

fixed pacing
See fixed session-level pacing.

fixed session-level pacing (fixed pacing)
A form of session-level pacing in which the data transfer rate is controlled using fixed pacing-window sizes, which are initialized at session-activation time. See also adaptive session-level pacing, session-level pacing.

flag A character that signals the occurrence of some condition, such as the end of a word.

flat file
A file that has no hierarchical structure.

flow In NetDA/2, the amount of traffic that can pass through a node, connection, or route in both directions during a given period of time.

flow control
1. In data communication, control of the data transfer rate. See also pacing.
2. In OSI, procedures that control the amount of data than can be sent from one node to another. Flow control is used to prevent a node from sending data to another node faster than the receiver can handle it.

flow reduction sequence number (FRSN)
A sequence number space used between two APPN nodes to reduce the amount of APPN topology information that must be exchanged when APPN nodes reconnect to each other.

flush In logical unit (LU) 6.2, the process of sending through the network all remaining buffered data generated by a transaction program. The transaction program issues the flush action to begin the process. It also occurs if the network operator issues the command.

FMD See function management data.

FMH See function management header.

focal point (FP)
An APPN network node that is the destination of alerts. A focal point allows a customer to centrally manage a network. See also management services focal point.

foreground process
A process that must be completed before another command is issued. See also background process.

foreground task
The task with which the user is interacting. See also background task.

foreign host
See remote host.

foreign network
Any network that is interconnected to the local network by one or more intermediate gateways or routers. See also local network.

fork To create and start a child process. See also exec.

format identification field (FID field)
In SNA, a field in each transmission header (TH) that indicates the format of the TH; that is, the presence or absence of certain fields. TH formats differ in accordance with the types of nodes between which they pass. See also origin address field.

formatted system service
A portion of VTAM that provides certain system services as a result of receiving a field-formatted command, such as an Initiate or Terminate command. See also unformatted system service.

FORMDEF
See form definition.

form definition (FORMDEF)
An Advanced Function Presentation (AFP) resource object that defines the characteristics of the form or printed media, including: overlays to be used, duplex printing, text suppression, the position of composed-text data on the form, and the number and modifications of a page.

forward explicit route
An explicit route that originates in the host.

forwarding server
A read-only server that replicates all changes sent to it. This contrasts to a peer/master server in that it is read only and it can have no peers.

FP See focal point.

fpblock
See file package block.

FQDN
See fully qualified domain name.

FQPCID
See fully qualified procedure correlation identifier.

fragment
See fragmentation.

fragmentation
The process of breaking down an Internet Protocol (IP) datagram into smaller parts to match the capabilities of the physical medium over which it will be transmitted. See also segmenting.

frame
1. The block of information transmitted between two or more stations in the data link layer of a network. It includes delimiters, control characters, and information.
2. In Open Systems Interconnection architecture, a data structure consisting of slots that can accept the values of specific attributes and from which inferences can be drawn.

frame check sequence (FCS)
In communications, a field in a frame used to determine if the frame was received without an error.

frame handler (FH)
See frame-relay frame handler.

frame handler subport (FHSP)
The access point of a frame-relay frame handler to a PVC segment. Frame handler subports function in pairs; frames enter the frame handler through one frame handler subport and exit through the other. See also subport.

frame level
See data link level.

frame level interface
In packet mode operation, the level of the interface between a data terminal equipment (DTE) and a data circuit-terminating equipment (DCE) associated with the exchange of packets contained in frames for local error control. See also packet level interface.

frame reject (FRMR)
In communications, a data link command or response used to reject a received frame. A frame reject is generally used to indicate that the received protocol data unit is not valid or not supported.

frame relay
A protocol for routing frames through the network based on the address field (data link connection identifier) in the frame and for managing the route or virtual connection.

frame-relay connection
See frame-relay physical line.

frame-relay frame handler (FRFH)
The function in a frame-relay node that routes (or switches) frames along a permanent virtual circuit (PVC). A frame handler receives frames from an adjacent frame-relay node and uses the DLCI to forward them to the next node on the PVC.

frame-relay network
A network that consists of frame-relay frame handlers (FRFH) in which frames are passed from one frame-relay terminating equipment (FRTE) station to another through a series of one or more FRFHs.

frame-relay physical line
The physical connection between two frame-relay nodes. A frame-relay physical line can simultaneously support PVC segments for both the

frame-handler and terminating-equipment functions. In NCP, a frame-relay physical line is defined as a nonswitched duplex line.

frame-relay protocol
A layer 2 frame-switching method that is defined by the American National Standards Institute (ANSI) and the International Telegraph and Telephone Consultative Committee (CCITT).

frame-relay segment set
The set of subports that defines the primary and substitute permanent virtual circuit (PVC) paths in an NCP with frame-relay switching equipment (FRSE) support.

frame-relay switch
A frame-relay node that provides both the frame-relay frame handler function and the local management interface (LMI) function.

frame-relay switching equipment subport set
The set of primary and, optionally, substitute frame handler subports (FHSPs) within an NCP that comprise those used for a given frame-relay segment set.

frame-relay switching equipment support
In NCP, a set of frame-relay functions that includes the frame-relay frame handler function and the local management interface (LMI) function. NCP provides additional functions, including performance measurement and enhanced reliability, that are not defined by ANSI or CCITT standards. See also frame-relay terminating equipment.

frame-relay terminal equipment
A device that can connect to a frame-relay network to provide the frame-relay terminating equipment function. See also frame-relay terminating equipment.

frame-relay terminating equipment (FRTE)
The function at the end of a frame-relay permanent virtual circuit (PVC). Frame-relay terminating equipment provides higher-layer protocols with access to a frame-relay network through terminating equipment subports (TESPs). It does this by (a) adding frame-relay frame headers to data for another protocol and sending the frames to adjacent frame-relay nodes, and (b) receiving frames from adjacent frame-relay nodes and removing the frame headers. See also frame-relay switching equipment support, frame-relay terminal equipment.

frame switching
The function performed by frame-relay nodes to route frames through a network.

framework
A set of object classes that provide a collection of related functions for a user or piece of software.

frequency coupler (F-coupler)
A physical device that merges broadband analog signals with digital data on an IBM Cabling System using shielded twisted-pair wiring. The IBM F-Coupler separates analog signals and sends them from the IBM Cabling System to the workstation. The F-Coupler allows the IBM Cabling System to accommodate simultaneous analog video with data traffic on a token-ring network.

FRF See field registration file.

FRFH See frame-relay frame handler.

FRMR See frame reject.

front-end processor (FEP)
See communication controller.

FRR See functional recovery routine.

FRSN See flow reduction sequence number.

FRTE See frame-relay terminating equipment.

FRU See field-replaceable unit.

FSM See finite state machine.

FTAM See file transfer, access, and management.

FTP See File Transfer Protocol.

full duplex (FDX)
See duplex.

full-screen application
An application program that requires control of a display screen. It cannot run in a window.

fullword
A sequence of bits or characters that comprises four bytes (one word) and is referred to as a unit. See also halfword.

fully meshed network
A network in which each routing or switching point is directly connected to every other routing or switching point. See also partially meshed network.

fully qualified domain name (FQDN)
In Internet communications, the name of a host system that includes all of the subnames of the domain name. An example of a fully qualified domain name is rchland.vnet.ibm.com. See also host name.

fully qualified name
A qualified name that includes all names in the hierarchical sequence above the structure member to which the name refers, as well as the name of the member itself.

fully qualified procedure correlation identifier (FQPCID)
See procedure correlation identifier.

functional recovery routine (FRR)
A z/OS recovery and termination manager that enables a recovery routine to gain control in the event of a program interrupt.

functional unit
Hardware, software, or a combination of hardware and software that is capable of accomplishing a specified purpose.

function call
An expression that transfers the path of execution from the current function to a specified function (the called function). A function call contains the name of the function to which control is transferred and a parenthesized list of values.

function management data (FMD)
A response unit (RU) category used for end-user data exchanged between

logical units (LUs) and for requests and responses exchanged between network services components of LUs, physical units (PU), and control points.

function management header (FMH)
One or more headers, optionally present in the leading request units (RUs) of an RU chain, that allow one LU to (a) select a transaction program or device at the session partner and control the way in which the end-user data it sends is handled at the destination, (b) change the destination or the characteristics of the data during the session, and (c) transmit between session partners status or user information about the destination (for example, a program or device). Function management headers can be used with LU type 1, 4, and 6.2 protocols.

function management profile
In SNA, a specification of various data flow control protocols (such as response unit (RU) chains and data flow control requests) and function management data options (such as use of function management headers, compression, and alternate codes) supported for a particular session. Each function management profile is identified by a number.

G

gadget
In the AIXwindows Toolkit, a windowless graphical object that looks like its equivalent like-named widget but does not support the translations, actions, or pop-up widget children supplied by that widget.

garbage collection
A routine that searches memory to reclaim space from program segments or inactive data.

gateway
1. A device or program used to connect networks or systems with different network architectures.
2. An entity that operates above the link layer and converts, when required, the interface and protocol used by one network into those used by another distinct network.

gateway-capable host
A host node that has a defined NETID and SSCPNAME but does not perform gateway control functions, such as cross-network session initiation and termination. See also gateway host.

gateway control function
A function that is performed by a gateway system services control point (SSCP) in conjunction with the gateway NCP. Such functions include assigning alias network address pairs for LU-LU sessions, assigning virtual routes for the LU-LU sessions in adjacent networks, and translating network names within BIND RUs.

gateway host
1. A host node that contains a gateway system services control point (SSCP). See also gateway-capable host.
2. In the AIX operating system, a host that connects independent networks. It has multiple interfaces, each with a different name and address.

gateway NCP
An NCP that performs address translation to allow cross-network session traffic. The gateway NCP connects two or more independent SNA networks.

gateway node
See gateway NCP.

gateway session
A session between an LU and an SNA host through the SNA gateway.

gateway SSCP
See designated gateway VTAM.

gateway VTAM
An SSCP that is capable of cross-network session initiation, termination, takedown, and session outage notification. A gateway VTAM is in session with the gateway NCP; it provides network name translation and assists the gateway NCP in setting up alias network addresses for cross-network sessions.

GCS

1. See Group Control System.
2. See graphic communication server.

GDDM
See Graphical Data Display Manager.

GDDM interface for X Window System (GDDMXD)
A graphical interface that formats and displays characters, graphics, and images on workstation display devices that support the X Window System.

GDDMXD
See GDDM interface for X Window System.

GDF See graphics data file.

GDS

1. See general data stream.
2. See graphic data server.
3. See Global Directory Service.

general data stream (GDS)
A structured field that precedes all mapped conversation user data in the communications data stream. It consists of a length (LL), which is defined as the first 2 bytes of the structured field, and a general data stream identifier (GDS ID), which is defined as the next 2 bytes following the length field that identifies the GDS-defined format of the data.

general data stream variable
An RU substructure that is preceded by an identifier and a length field and includes either application data, user control data, or SNA-defined control data.

generalized path information unit trace (GPT)
A record of the flow of path information units (PIUs) exchanged between the network control program and its attached resources. PIU trace records consist of up to 44 bytes of transmission header (TH), request/response header (RH), and request/response unit (RU) data.

generalized trace facility (GTF)
A z/OS service program that records significant system events such as I/O interrupts, SVC interrupts, program interrupts, and external interrupts.

general topology manager (GTM)
In Tivoli NetView, the component that accepts information about resources that are accessed through protocols other than the Internet Protocol, stores this information in a database, and displays it to the user.

generation
The process of assembling and link editing definition statements so that resources can be identified to all the necessary programs in a network.

generic alert
Alert information that is provided as text or is encoded using a method in which code points provide an index into short units of stored text. The use of generic alerts prevents the receiver from having to recognize and understand each unique problem for which an alert is sent. See also nongeneric alert.

generic collection
In a Tivoli environment, a collection that contains objects representing resources of any type.

generic resource name
A name used by VTAM to represent application programs that provide the same function in order to handle session distribution and balancing in a sysplex environment.

Generic Security Service API (GSS API)
A common application programming interface (API) for accessing security services.

GID See group ID.

GIF See graphical interchange format.

Gigabit Ethernet
A variation of the Ethernet protocol that is capable of transmitting data at one billion bits per second. Gigabit Ethernet on the System i family is supported only by TCP/IP in full-duplex mode.

giveback
The process by which an alternate subsystem releases itself from its extended recovery facility (XRF) sessions with terminal users and is replaced by the primary subsystem. See also takeover.

Global Directory Service (GDS)
The DCE Directory Service component that locates other cells using global cell names. GDS can use an X.500-based directory service or the Internet distributed directory service called Domain Name Service (DNS). See also Cell Directory Service.

glyph An image, usually of a character, in a font.

GMT See Greenwich mean time.

Gopher
In Internet communications, a distributed information service that makes available hierarchical collections of information. A single Gopher client can access information from any accessible Gopher server. The Gopher client provides the user with a menu-driven interface.

GPT See generalized path information unit trace.

Graphical Data Display Manager (GDDM)
An IBM computer-graphics system that defines and displays text and graphics for output on a display or printer.

graphical interchange format (GIF)
In NetView for AIX, the format that is used for the background pictures of a network topology map.

graphical user interface (GUI)
A computer interface that presents a visual metaphor of a real-world scene, often of a desktop, by combining high-resolution graphics, pointing devices, menu bars and other menus, overlapping windows, icons and the object-action relationship.

graphic communication server (GCS)
The part of the NetView Graphic Monitor Facility that uses LU 6.2 to transport data between the NetView program and the server workstation and between the server workstation and its client workstations.

graphic data server (GDS)
The part of the NetView management console that receives network management data from Tivoli NetView for OS/390, maintains this data (except for dynamically created view information), and correlates this data with views.

graphic monitor
The graphical user interface (GUI) component of the NetView Graphic Monitor Facility.

graphics data file (GDF)
A picture definition in a coded format that is used by the Graphical Data Display Manager (GDDM) to optionally provide the user with a lower-level program interface than the GDDM application program interface (API).

graphic service facility
A GraphicsView/2 facility that logs trace and error data.

gratuitous ARP
An ARP reply when there was no ARP request that recommends that all hosts on the network receive the ARP reply and refresh their ARP cache. For IP address takeover via IP aliases to be successful, systems and devices connected to the network must be configured to support gratuitous ARP. See also Address Resolution Protocol.

Greenwich mean time (GMT)
The mean solar time at the meridian of Greenwich, England.

group A logical organization of users whose membership allows them to perform the same activities or provide the same authority to access resources.

group address
In communications, a multidestination address associated with one or more stations on a given network.

Group Control System (GCS)
In OSI Communications Subsystem, a VM operating environment in which the subsystem and Virtual Telecommunications Access Method (VTAM) run.

group control system group
A group of virtual machines that share common storage and load the same saved-VM system through a control program (CP) command or directory entry.

group ID (GID)
1. In Resource Access Control Facility (RACF), a string of one to eight characters that identifies a group. The first character must be A through Z, #, $, or @. The rest can be A through Z, #, $, @, or 0 through 9.
2. In the UNIX operating system, an integer that uniquely identifies each group of users to the operating system.

group polling
A process whereby a single poll is sent to a collection point for a group of stations, inviting a response from any station in the group that has data to send.

group profile
A profile that provides the same authority to a group of users.

GSS API
See Generic Security Service API.

GTF See generalized trace facility.

GTM See general topology manager.

guest An operating system that runs in a virtual machine managed by the z/VM Control Program (CP).

guest virtual machine (GVM)
In z/VM, the functional equivalent of a System z9 or zSeries system, including the virtual processors, virtual storage, virtual devices, and virtual channel subsystem allocated to a single user. Each guest virtual machine can be controlled by an operating system, such as CMS, z/VSE, z/OS, or Linux.

GUI See graphical user interface.

GVM See guest virtual machine.

H

hacker
An unauthorized person who tries to gain access to protected resources on a system.

half-duplex (HD, HDX)
Describing a communications connection over which only one device at a time can transmit data. See also duplex.

half-duplex operation
A mode of operation that allows messages to be transmitted in both directions, but not simultaneously.

half-duplex transmission
Data transmission that can be transmitted in either direction, one direction at a time.

half-session
A session-layer component consisting of the combination of data flow

control and transmission control components comprising one end of a session. See also primary end of a session, secondary end of a session, session connector.

halfword
A contiguous sequence of bits or characters that constitutes half a computer word and can be addressed as a unit. See also doubleword, fullword.

halt I/O (HIO)
An IBM System 370 instruction to stop I/O operations across a channel.

handle
1. In application programming interfaces, a variable that represents an object, an instance of an application using some function, or a processing session.
2. In the AIX operating system, a data structure that is a temporary local identifier for an object. Allocating a handle creates it. Binding a handle makes it identify an object at a specific location.
3. The portion of a message that contains control information.

handshake
1. The exchange of messages at the start of a Secure Sockets Layer session that allows the client to authenticate the server using public key techniques (and, optionally, for the server to authenticate the client) and then allows the client and server to cooperate in creating symmetric keys for encryption, decryption, and detection of tampering.
2. In Transport Layer Security (TLS), the initial setup of a TLS connection.

hardcopy
A printed copy of machine output in a visually readable form, such as printed reports, documents, and summaries.

hard disk
A nonremovable storage medium used for storage of data on a personal computer.

hard error
An error condition on a network that requires that the network be reconfigured or that the source of the error be removed before the network can resume reliable operation.

hard failure
See hard error.

hardware configuration definition (HCD)
An interactive interface in z/OS that is used to define hardware configurations to the operating system and the channel subsystem.

Hardware Management Console (HMC)
A system that controls managed systems, including the management of logical partitions and use of Capacity Upgrade on Demand. Using service applications, the HMC communicates with managed systems to detect and consolidate information, which is then sent to IBM for analysis. See also managed system.

hardware monitor
A monitor that collects and displays events and statistical data both for hardware and for software applications to identify failing resources in a

network. For problem determination, it also provides probable cause information and recommended actions. See also session monitor.

HASP See Houston Automatic Spooling Program.

HCD See hardware configuration definition.

HD See half-duplex.

HDLC See High-level Data Link Control.

HDX See half-duplex.

header
System-defined control information that precedes user data.

header file
See include file.

hello datagram
In NCP Internet Protocol (IP) support, an IP datagram that establishes and verifies communication between an NCP IP router and its IP owner.

hello message
A message sent periodically to establish and test reachability between routers or between routers and hosts.

Hello Protocol
A protocol used by OSPF systems for establishing and maintaining neighbor relationships.

heterogeneous network
In MPTN architecture, a single logical network formed by MPTN gateways that join individual networks that support different transport protocols.

hex See hexadecimal.

hexadecimal (hex)
Pertaining to a numbering system that has a base of 16.

HFS See hierarchical file system.

hierarchical file system (HFS)
A system for organizing files in a hierarchy, as in a UNIX system.

hierarchical network
A network in which hosts are administered by a tree structure of authority. This network structure relieves the administrative burden of the central authority.

hierarchy
A structure that has a predetermined ordering from high to low.

High-level Data Link Control (HDLC)
A form of communications line control that uses a specified series of bits rather than control characters to control data transmission over a communications line.

high-level language (HLL)
A programming language that provides some level of abstraction from assembler language and independence from a particular type of machine.

high-level language application programming interface (HLLAPI)
A programming interface that usually operates in conjunction with an emulator, such as 3270 emulation, and allows interaction using 3270 data stream between a host and a remote application program.

high-performance data transfer (HPDT)
A high-performance, multiprotocol communication method optimized for high-speed links.

high-performance data transfer services (HPDT services)
In VTAM, a family of functions that enhances the efficiency of large message transfers for VTAM application programs.

high-performance file system (HPFS)
In PC operating systems, an installable file system that uses high-speed buffer storage, known as a cache, to provide fast access to large disk volumes. The file system also supports the coexistence of multiple, active file systems on a single personal computer, with the capability of multiple and different storage devices.

High-Performance Routing (HPR)
An addition to APPN that enhances data-routing performance and session reliability.

HIO See halt I/O.

HiperSockets
A System z hardware feature that provides high performance internal communications between logical partitions (LPARs) within the same central processor complex (CPC) without the use of any additional or external hardware equipment such as a channel adapter.

hiperspace
A high-performance, virtual-storage space of up to 2 gigabytes (GB). Unlike an address space, a hiperspace contains only user data and does not contain system control blocks or common areas; code does not execute in a hiperspace. Unlike a data space, data in a hiperspace cannot be referenced directly; data must be moved to an address space in blocks of 4 KB before being processed.

Hiragana
One of the two common Japanese phonetic alphabets (the other is katakana). The symbols are cursive or curvilinear in style. Hiragana syllables are typically used in the representation of native Japanese words and grammatical particles. See also Kanji, Katakana.

HLL See high-level language.

HLLAPI
See high-level language application programming interface.

HMC See Hardware Management Console.

home address space
The address space in which MVS initially dispatches a work unit. When MVS initially dispatches a work unit, the home address space, the primary address space, and the secondary address space are the same. During execution of the work unit, the home address space remains the same, but the primary and secondary address spaces can change.

hop One segment of a transmission path between adjacent nodes in a routed network.

hop count
A measure of the links between two systems on a network. A hop count of 5 means that four gateways separate the source and destination machines.

hop count limit
In the IBM Token-Ring Network, the maximum number of bridges through which a frame may pass on the way to its destination.

host
1. In performance profiling, a machine that owns processes that are being profiled. See also server.
2. In a cooperative processing environment, the system running the server program with which the CoOperative Development Environment/400 session communicates.
3. A computer that is connected to a network and that provides an access point to that network. The host can be a client, a server, or both a client and server simultaneously. See also client, server.

host address
See IP address.

host ID
In TCP/IP, that part of the Internet address that defines the host on the network. The length of the host ID depends on the type of network class (A, B, or C).

host LU
In SNA, a logical unit in a host processor; for example, a VTAM application program.

host name
In Internet communication, the name given to a computer. The host name might be a fully qualified domain name such as mycomputer.city.company.com, or it might be a specific subname such as mycomputer. See also fully qualified domain name, IP address, network address.

host namespace profile
A profile that contains information about the list of hosts and their properties, such as host IP addresses and host aliases.

host node
A node that provides an application programming interface (API) and a common application interface.

host processor
1. The primary or controlling computer in a multiple computer installation.
2. A processor that controls a user application network.

host transit time
The average time (in seconds) that all transactions spend in the host. The time includes both VTAM and application time. It is also reported as an average for the transactions that originate at the logical unit for which data collection is occurring.

hot key
1. A key sequence used to shift operations between different applications or between different functions of an application.
2. To jump from a host session to an application on a workstation, or from the workstation to the host session.

Houston Automatic Spooling Program (HASP)
A mainframe spooling program that provides task management, job management, and data management functions.

hover help
Explanatory text that can be viewed by moving a cursor over a graphical user interface (GUI) item such as an icon, field, or text string. Hover help can contain rich text and links.

HPDT See high-performance data transfer.

HPDT services
See high-performance data transfer services.

HPFS See high-performance file system.

HPR See High-Performance Routing.

HPR connection
See Rapid Transport Protocol connection.

HPR pipe
See Rapid Transport Protocol connection.

HTML
See Hypertext Markup Language.

HTTP See Hypertext Transfer Protocol.

HTTP server
A program that enables a computer that uses the Hypertext Transfer Protocol (HTTP) to serve objects by responding to requests from other programs, such as browsers.

HTTP Server for i5/OS
A licensed program that enables a computer that uses the Hypertext Transfer Protocol (HTTP) to serve objects by responding to requests from other programs, such as browsers. The IBM HTTP Server for i5/OS, which supports the Secure Sockets Layer (SSL) protocol, provides secure communications between a server and an SSL-capable browser.

hub A point, or piece of hardware, that connects multiple devices in a network.

hung terminal
A terminal to which a session is disrupted and cannot send or receive commands.

hypertext
A way of presenting information online with connections (called hypertext links) between one piece of information (called a hypertext node) and another.

Hypertext Markup Language (HTML)
A markup language that conforms to the Standard Generalized Markup Language (SGML) standard and was designed primarily to support the online display of textual and graphical information, including hypertext links.

Hypertext Transfer Protocol (HTTP)
An Internet protocol that is used to transfer and display hypertext and XML documents on the web.

I

IAB See Internet Architecture Board.

IAC See interpret as command.

IBM PS/2 ActionMedia II
See ActionMedia II.

ICA See integrated communication adapter.

ICMP See Internet Control Message Protocol.

ICN See interchange node.

ICNCB
See intelligent controller node control block.

icon A graphical representation of an object (for example, a file or program) that consists of an image, an image background, and a label.

ICP See Internet Control Protocol.

ICTG See intercluster TG.

ICU See Interactive Chart Utility.

ICV See initial chaining value.

IDL See Interface Definition Language.

IDLC See integrated data link control.

idle character
A character transmitted on a telecommunication line that is not intended to represent data and does not result in an output operation at the accepting terminal.

IDS See intrusion detection system.

IEEE See Institute of Electrical and Electronics Engineers.

IEEE 802.2
An IEEE standard describing how data is formatted into frames for LAN transmission.

IESG See Internet Engineering Steering Group.

IETF See Internet Engineering Task Force.

I format
See information format.

I frame
See information frame.

IGP See Interior Gateway Protocol.

IKE See Internet Key Exchange.

ILU

1. See independent logical unit.
2. See initiating logical unit.

immediate access storage
A storage device whose access time is minimal compared to other operating times.

immediate command
A command (such as GO, RESET, or LOGOFF) that begins processing as soon as the operator enters it, possibly preempting other ongoing processing. See also regular command.

immediate-request mode
In SNA, an operational mode in which the sender stops sending request units (RUs) on a normal or expedited flow after sending a definite-response request chain on that flow until a response is made to the chain. See also delayed-request mode.

immediate-response mode
In SNA, an operational mode in which the receiver responds to request units (RUs) on a given normal flow in the order that it receives them. See also delayed-response mode.

impedance
The combined effect of resistance, inductance, and capacitance on a signal at a given frequency.

implicit focal point
An assigned focal point for which the nodes to be included in its sphere of control (SOC) are defined at the SOC nodes. The management services capabilities exchange that brings a node into the sphere of control of an implicit focal point is initiated by the SOC node. See also explicit focal point.

implicit pool
A pool of workstation or printer LUs that Communications Server uses to complete connection requests that do not specify a particular device name. See also explicit pool.

IMR See intensive mode recording.

IMS See Internet Management Specification.

IMS/VS
See Information Management System/Virtual Storage.

inactive
1. In VTAM, the state of a resource or a major or minor node that has not been activated or for which the VARY INACT command has been issued. See also inoperative.
2. Pertaining to a node or device not connected or not available for connection to another node or device.
3. Pertaining to a window that does not have the input focus. See also input focus.

InARP
See Inverse Address Resolution Protocol.

inbound
In communication, pertaining to data that is received from the network. See also outbound.

inbound filter
A filter that is applied to frames that flow into a port from a transmission link or LAN.

include file
A text file that contains declarations that are used by a group of functions, programs, or users.

incoming-call packet
A call supervision packet transmitted by a data circuit-terminating equipment (DCE) to inform a called data terminal equipment (DTE) that another DTE has requested a call.

independent logical unit (ILU)
A logical unit (LU) that can both send and receive a BIND command, and which supports single, parallel, and multiple sessions.

indicator
In TME 10 Distributed Monitoring, an icon that displays the status of a monitor that has been associated with it.

indirect activation
In VTAM, the deactivation of a lower-level resource of the resource hierarchy as a result of a deactivation command naming a higher-level resource. See also direct activation.

indirect routing
In Internet communications, the transmission of a datagram to a router for forwarding to a destination that resides on a different network from the source.

information format (I format)
A format that is used for the transfer of information.

information frame (I frame)
1. In video compression, a frame that has been compressed independently of any other frames.
2. In communications, a transmission frame that is sequentially numbered and used to transmit data.

information management database
A systems management tool that is used to collect, organize, and keep track of problems and their resolutions.

Information Management System/Virtual Storage (IMS/VS)
A database/data communication (DB/DC) system that can manage complex databases and networks.

inhibited
In VTAM, pertaining to a logical unit (LU) that has indicated to its system services control point (SSCP) that it is temporarily not ready to establish LU-LU sessions. An initiate request for a session with an inhibited LU will be rejected by the SSCP. The LU can separately indicate whether this applies to its ability to act as a primary logical unit (PLU) or a secondary logical unit (SLU). See also enabled.

initial chaining value (ICV)
In Cryptographic Support, an 8-byte, pseudo-random number used to start a cipher block chaining operation.

initial program load (IPL)
The process of loading the operating system and other basic software into main storage.

initiate
A network services request sent from a logical unit (LU) to a system services control point (SSCP) requesting that an LU-LU session be established.

initiating logical unit (ILU)
The logical unit that first requests that a session be initiated. The ILU can be one of the session participants, in which case it is also called the origin logical unit (OLU), or it can be a third-party logical unit that identifies the participants and chooses the OLU. See also destination logical unit, origin logical unit.

INN See intermediate network node.

inode The internal structure that describes the individual files on AIX, UNIX, or Linux systems. An inode contains the node, type, owner, and location of a file.

inoperative
The condition of a resource that was active, but is not active now. See also active, inactive.

input field
1. A field specified in a display file or database file that is reserved for information supplied by a user.
2. An area in a presentation space into which the program accepts input.

input focus
The position, indicated on the screen, where a user's interaction with the keyboard appears.

input/output (I/O)
Pertaining to a device, process, channel, or communication path involved in data input, data output, or both.

input/output channel (I/O channel)
In a data processing system, a functional unit, controlled by the processing unit, that transfers data between main storage and attached devices.

input/output configuration data set (IOCDS)
A configuration definition built by the I/O configuration program (IOCP) and stored on disk files associated with the processor controller.

input/output configuration program (I/O configuration program, IOCP)
A program that defines to a system all the available I/O devices and channel paths.

input/output definition file (IODF)
A linear data set (LDS) that contains I/O definition information. This information includes processor I/O definitions and operating-system I/O definitions. A single IODF can contain several processor and several operating-system I/O definitions.

input/output privilege level (IOPL)
A I/O task level that determines when a task is allowed access to an I/O port.

input/output problem determination (IOPD)
A facility that detects pending I/O requests when VTAM® has sent a request to another part of the network and no response has been received after a certain period of time.

input/output processor (I/O processor, IOP)
A processor dedicated to controlling channels or communication links.

insert In LANs, to make an attaching device an active part of the LAN.

installation
The process of adding a hardware or software component to a computing environment.

installation exit
The means specifically described in an IBM software product's documentation by which an IBM software product may be modified by a customer's system programmers to change or extend the functions of the IBM software product. Such modifications consist of exit routines written to replace one or more existing modules of an IBM software product, or to add one or more modules or subroutines to an IBM software product. See also user exit.

installation exit routine
A routine written by a user to take control at an installation exit of an IBM software product.

installation-wide exit
See installation exit.

instance
A specific occurrence of an object that belongs to a class. See also object.

instantiate
To represent an abstraction with a concrete instance.

Institute of Electrical and Electronics Engineers (IEEE)
A professional society accredited by the American National Standards Institute (ANSI) to issue standards for the electronics industry.

integrated communication adapter (ICA)
A communication adapter that is an integral part of the host processor. See also external communication adapter.

integrated data link control (IDLC)
A full-duplex high-level data link control (HDLC) protocol. It is IBM's implementation of the CCITT Q.922 standard or link access procedure extended (LAPE). IDLC can support point-to-point workstation connections over a full-duplex wide area network (WAN).

Integrated Services Digital Network (ISDN)
An international communications standard for sending voice, video, and data over digital telephone lines.

Integrated Solutions Console (ISC)
The core technology of the Autonomic Computing initiative that provides a common, consistent portal-based user interface, which is based on industry standards and component reuse. The Integrated Solutions Console can host common system administrative functions that are provided by server, software, or storage products.

intelligent agent
Software that monitors conditions or actions on a network node and contains logic enabling it to respond to these conditions or actions.

intelligent controller node control block (ICNCB)
A control block in VTAM that represents a channel-attached communication controller or cluster controller.

intensive mode recording (IMR)
An NCP function that forces the recording of temporary errors for a specified resource.

interactive

1. Pertaining to the dialog-like exchange of information between people and a computer. See also batch.
2. Pertaining to a program or system that alternately accepts input and responds.

Interactive Chart Utility (ICU)
A menu-driven component of the Graphical Data Display Manager (GDDM) with which non-programmers can display, print, or plot charts, graphs, and diagrams.

Interactive Problem Control System (IPCS)
A component of MVS and z/OS that permits online problem management, interactive problem diagnosis, online debugging for disk-resident abend dumps, problem tracking, and problem reporting.

Interactive System Productivity Facility (ISPF)
An IBM licensed program that serves as a full-screen editor and dialog manager. Used for writing application programs, it provides a means of generating standard screen panels and interactive dialogs between the application programmer and the terminal user. See also Time Sharing Option.

interchange node (ICN)
A node that acts as both an APPN network node and a type 5 subarea node to transform APPN protocols to subarea protocols and vice versa. See also migration data host.

interchange transmission group
A transmission group that represents a cross-domain connection between an interchange node and any other node that contains a control point.

intercluster link
See intersubnetwork link.

intercluster TG (ICTG)
An intersubnetwork transmission group (ISTG) that connects two APPN subnetworks that have the same network identifier. At least one node of the pair connected by an ICTG must be a border node.

interconnected networks
SNA networks connected by gateways.

interconnection
See SNA network interconnection.

interface
A shared boundary between independent systems. An interface can be a hardware component used to link two devices, a convention that supports communication between software systems, or a method for a user to communicate with the operating system, such as a keyboard.

Interface Definition Language (IDL)
In CORBA, a declarative language that is used to describe object interfaces, without regard to object implementation.

interface layer
In Internet communications, the Internet Protocol (IP) layer that is responsible for datagram transmission on a single physical network.

interior gateway
In Internet communications, a gateway that communicates only with its own autonomous system. See also exterior gateway.

Interior Gateway Protocol (IGP)
An Internet protocol that is used by gateways in an autonomous system to transfer routing information.

interleave
To arrange parts of one sequence of things or events so that they alternate with parts of one or more other sequences of the same nature and so that each sequence retains its identity.

interleaving
1. The alternating of two or more operations or functions through the overlapped use of a computer facility.
2. The simultaneous accessing of two or more bytes or streams of data from distinct storage units.

intermediate network node (INN)
In APPN, a node that is part of a route between an OLU and a DLU but that neither contains the OLU or the DLU nor serves as the network server for either the OLU or DLU.

intermediate node
A node that is at the end of more than one branch.

intermediate routing function (IRF)
A routing function that allows a network location to receive session data from an adjacent location and route it to the next location on the session path.

intermediate routing network
See APPN intermediate routing network.

intermediate routing node (IRN)
A subarea node, which may receive and route sessions that neither originate in nor are destined for network addressable units in that subarea node.

intermediate session routing (ISR)
A type of routing function within an APPN network node that provides session-level flow control and outage reporting for all sessions that pass through the node but whose end points are elsewhere.

intermediate SSCP
An SSCP along a session initiation path that does not own either of the LUs that are involved in a cross-network LU-LU session.

intermessage delay
The elapsed time between the receipt of a system response at a terminal and the time when a new transaction is entered.

internal PVC segment
A permanent virtual circuit (PVC) segment that is between two frame handler subports in the same frame-relay node.

internal queued direct I/O
See HiperSockets.

internal trace table
A table of events that is maintained in internal memory for purposes of problem diagnosis.

International Organization for Standardization (ISO)
An international body charged with creating standards to facilitate the exchange of goods and services as well as cooperation in intellectual, scientific, technological, and economic activity.

International Technical Support Organization (ITSO)
An IBM organization that provides information technology (IT) professionals and customers with technical information, assistance, guidance, and training. ITSO publishes Redbooks that supplement product manuals by describing installation experiences and scenarios and providing other useful information gathered by the companies' own systems and customer engineers. ITSO also conducts forums and training workshops for IT professionals.

International Telecommunication Union (ITU)
A United Nations treaty agency whose mission is to ensure that all nations have access to telecommunication services. The ITU works closely with all standards organizations to form an international uniform standards system for communication. It comprises three branches: telecommunications standardization, telecommunications development, and radiocommunication.

International Telecommunication Union Telecommunication Standardization Sector (ITU-T, Telecommunication Standardization Sector)
The part of the International Telecommunication Union (ITU) that is responsible for developing recommendations for telecommunications.

Internet Architecture Board (IAB)
The technical body that oversees (at a high level) the work of the Internet Engineering Task Force (IETF). The IAB approves the membership of the IETF.

Internet Control Message Protocol (ICMP)
An Internet protocol that is used by a gateway to communicate with a source host, for example, to report an error in a datagram.

Internet Control Protocol (ICP)
The VIrtual NEtworking System (VINES) protocol that provides exception notifications, metric notifications, and PING support.

Internet drafts
Proposals, techniques, and mechanisms that document the Internet Engineering Task Force (IETF) work in progress and that define protocols and their characteristics in an internet. After the drafts are approved, they become Requests for Comments (RFCs).

Internet Engineering Steering Group (IESG)
The executive committee of the Internet Engineering Task Force (IETF). The IESG reviews and oversees the work produced by individual IETF working groups and charters all new working groups.

Internet Engineering Task Force (IETF)
The task force of the Internet Architecture Board (IAB) that is responsible for solving the short-term engineering needs of the Internet. The IETF consists of numerous working groups, each focused on a particular problem. Specifications proposed as standards typically undergo a period of development and review before they are adopted as standards.

Internet Key Exchange (IKE)
A protocol that, when used with IPSec, supports the automatic negotiation of security associations as well as the automatic generation and refresh of cryptographic keys. Generally, IKE is used as part of virtual private networking.

Internet layer
In Internet communications, the layer corresponding to the network layer in Open Systems Interconnection (OSI) architecture.

Internet Management Specification (IMS)
A draft specification for an open standard for managing Internet resources and services.

internet object
In Tivoli NetView, a node or a network that can be accessed by the Internet Protocol.

Internet Protocol (IP)
A protocol that routes data through a network or interconnected networks. This protocol acts as an intermediary between the higher protocol layers and the physical network. See also Transmission Control Protocol.

Internet Protocol Security (IPsec)
A set of protocols that provide cryptographic security services at the network layer. See also virtual private network.

Internet router
A device that enables an IP host to act as a gateway for routing data between separate networks that use a specific adapter.

Internet suite of protocols
Networking standards defined by the Internet Engineering Task Force (IETF), for example, TCP/IP.

internetwork
Any wide area network connecting more than one network.

Internetwork Packet Exchange (IPX)
A connectionless datagram protocol, used in a NetWare LAN environment, to transfer data to a remote node.

interNIC
See Network Information Center.

internode routing
The capability of path control to route PIUs from half-sessions to data link control and from data link control to half-sessions for sessions between NAUs that reside in different nodes.

interoperability
The ability of a computer or program to work with other computers or programs.

interpret as command (IAC)
A special character in the telnet protocol that indicates that the characters that follow represents a command.

interpret table
In VTAM, an installation-defined correlation list that translates an argument into a string of eight characters. Interpret tables can be used to translate logon data into the name of an application program for which the logon is intended.

interprocess communication (IPC)
The process by which programs send messages to each other. Sockets, semaphores, signals, and internal message queues are common methods of interprocess communication. See also client.

interrupt
Suspension of a process, such as execution of a computer program, caused by an external event and performed in such a way that the process can be resumed.

interrupt number
The identification that is used to send a signal from an installed hardware feature to the CPU requesting attention. Different hardware features use different interrupt numbers.

intersubnetwork link (ISL)
A link that interconnects nodes in two topology subnetworks.

intersubnetwork TG (ISTG)
A transmission group that interconnects nodes in two topology subnetworks.

intersystem communication (ISC)
1. An extension of IMS Multiple Systems Coupling (MSC) that, when both subsystems use ISC, permits the connection of IMS to another IMS subsystem, to CICS Transaction Server for z/OS, or to a user-written subsystem.
2. A CICS facility that provides inbound and outbound support for communication from other computer systems.

inter-user communication vehicle (IUCV)
A VM facility for passing data between virtual machines and VM components.

intranet
An organization's internal network that uses the IP protocol.

intranode routing
The capability of path control to route PIUs for sessions between NAUs that reside in the same node.

intrapartition
In CICS, pertaining to the same CICS address space.

intrusion detection system (IDS)
Software that detects attempts or successful attacks on monitored resources that are part of a network or host system.

Inverse Address Resolution Protocol (InARP)
An Internet protocol used for locating a protocol address through the known hardware address. In a frame-relay context, the data link connection identifier (DLCI) is synonymous with the known hardware address.

invoke ID
In the DCE X/Open Directory Service, an integer used to distinguished an asynchronous directory operation from all other outstanding ones.

I/O See input/output.

I/O cage
A physical area of the processor frame where connections to the central processor complex are made.

IOCDS
See input/output configuration data set.

I/O channel
See input/output channel.

I/O completion port (IOCP)
A Windows NT scheduling construct that is tied directly to a device handle and any I/O requests made to it. Using I/O completion ports enables matching of notifications to I/O completions and minimizes context switches among worker threads. They provide a more efficient method for multithreaded server applications to process data.

I/O configuration program
See input/output configuration program.

IOCP
1. See I/O completion port.
2. See input/output configuration program.

IODF See input/output definition file.

IOP See input/output processor.

IOPD See input/output problem determination.

IOPL See input/output privilege level.

I/O processor
See input/output processor.

IP See Internet Protocol.

IP address
A unique address for a device or logical unit on a network that uses the Internet Protocol standard. See also host name, network address.

IPC See interprocess communication.

IPCS See Interactive Problem Control System.

IP datagram
A unit of information that is sent across a TCP/IP network. An IP datagram contains both data and header information, such as the IP addresses of the origin and of the destination.

IP filter
In the Internet suite of protocols, a set of rules that is based on IP addressing that controls whether one host can access another host through a firewall. See also filter.

IPL See initial program load.

IP layer
See network layer.

IPM See isolated pacing message.

IPR See isolated pacing response.

IP route
A network path between any two IP addressable points in a network.

IP router
A device in an IP internet that is responsible for making decisions about the paths over which network traffic will flow. Routing protocols are used to gain information about the network and to determine the best route over which the datagram should be forwarded toward the final destination. The datagrams are routed based on IP destination addresses.

IPsec See Internet Protocol Security.

IP Security Architecture
A collection of Internet Engineering Task Force (IETF) standards that define an architecture at the Internet Protocol (IP) layer to protect IP traffic by using various security services.

IP tunnel
A path for data flow between two Internet Connection Secured Network Gateways. Packets flowing through an IP tunnel are encrypted and encapsulated to ensure the security of the data.

IPX See Internetwork Packet Exchange.

IPX address
The 10-byte address, consisting of a 4-byte network number and a 6-byte node address, that is used to identify nodes in the IPX network. The node address is usually identical to the medium access control (MAC) address of the associated LAN adapter.

IPX network number
An 8-digit hexadecimal number that identifies the IPX network.

IPX router
A device in an IPX network that is responsible for making decisions about the paths over which network traffic will flow. Routing protocols, such as the Routing Information Protocol (RIP), are used to gain information about the network and to determine the best route over which the datagram should be forwarded toward the final destination. The datagrams are routed based on the IPX network numbers of their destination addresses.

IRF See intermediate routing function.

IRN See intermediate routing node.

ISC

1. See Integrated Solutions Console.
2. See intersystem communication.

ISDN See Integrated Services Digital Network.

ISL See intersubnetwork link.

ISO See International Organization for Standardization.

isolated pacing message (IPM)
An SNA message that indicates whether the pacing window should be changed.

isolated pacing response (IPR)
An SNA message that indicates that data has been received and that the next window of data may be sent.

ISPF See Interactive System Productivity Facility.

ISR See intermediate session routing.

ISTATUS
In VTAM and NCP, a definition specification method for indicating the initial status of resources.

ISTG See intersubnetwork TG.

iterative server
A server that can handle only one connection at a time. It can accept a new connection request only when it has completed processing the transaction started by a previous request. See also concurrent server.

ITSO See International Technical Support Organization.

ITU See International Telecommunication Union.

ITU-T See International Telecommunication Union Telecommunication Standardization Sector.

IUCV See inter-user communication vehicle.

J

J1 See T1.

Japanese Industrial Standards Committee (JISC)
The national standards-setting organization in Japan.

Java An object-oriented programming language for portable interpretive code that supports interaction among remote objects. Java was developed and specified by Sun Microsystems, Incorporated.

Java Management application programming interface (JMAPI)
An application programming interface that provides a set of extensible objects and methods for developing distributed systems-, network-, and service-management application programs for managing an enterprise network over the Internet.

JCL See job control language.

JES See Job Entry Subsystem.

JES2 An MVS subsystem that receives jobs into the system, converts them to internal format, selects them for execution, processes their output, and purges them from the system. In an installation with more than one processor, each JES2 processor independently controls its job input, scheduling, and output processing. See also JES3, Job Entry Subsystem.

JES3 An MVS subsystem that receives jobs into the system, converts them to internal format, selects them for execution, processes their output, and purges them from the system. In complexes that have several loosely coupled processing units, the JES3 program manages processors so that the global processor exercises centralized control over the local processors and distributes jobs to them using a common job queue. See also JES2, Job Entry Subsystem.

JES reader
The part of the Job Entry Subsystem (JES) that receives job input and records it in the job queue and spool data set.

JES writer
The part of the Job Entry Subsystem (JES) that receives job output and writes it to end-use devices.

JETBEUI
The transport and network layer function conforming to the 3Com/Microsoft network driver interface specification (NDIS). JETBEUI converts network control blocks into network frames and delivers them to the IEEE 802.2 sublayer.

JISC See Japanese Industrial Standards Committee.

jitter A signal distortion through a network that causes packets to arrive out of order or differently than their original timing reference.

JMAPI
See Java Management application programming interface.

job A separately executable unit of work.

job control language (JCL)
A command language that identifies a job to an operating system and describes the job requirements.

Job Entry Subsystem (JES)
An IBM licensed program that receives jobs into the system and processes all output data that is produced by those jobs. See also JES2, JES3.

journal

1. A chronological record of changes made in a set of data; the record can be used to reconstruct a previous version of the set.
2. The process of recording information sequentially in a database.

journaling
The process of recording, in a journal, the changes made to objects, such as physical file members or access paths, or the depositing of journal entries by system or user functions.

K

Kanji A graphic character set consisting of symbols used in Japanese ideographic alphabets. Each character is represented by 2 bytes.

Katakana
A Japanese phonetic syllabary used primarily for foreign names and place names and words of foreign origin. See also Hiragana, Kanji.

Kb See kilobit.

KB See kilobyte.

kbps See kilobits per second.

keepalive message
In Internet communications, a message sent among nodes when no data traffic has been detected for a given period of time. This communication ensures the vitality of the session by keeping the link "alive."

KEK See key-encrypting key.

Kerberos
A network authentication protocol that is based on symmetric key cryptography. Kerberos assigns a unique key, called a ticket, to each user who logs on to the network. The ticket is embedded in messages that are sent over the network. The receiver of a message uses the ticket to authenticate the sender.

Kerberos master machine
In Kerberos, the host machine on which the Kerberos database resides.

Kerberos master password
In Kerberos, the password required to change or access the Kerberos database.

Kerberos principal
In Kerberos, a service or user that is known to the Kerberos system. See also principal name.

Kerberos realm
In Kerberos, a set of clients that share the same Kerberos database.

kernel The part of an operating system that contains programs for such tasks as input/output, management and control of hardware, and the scheduling of user tasks.

keyboard remapping
A facility that allows users to change the key assignments on the keyboard that they are using for emulation.

key-encrypting key (KEK)
A key that is used exclusively for encrypting and decrypting keys. See also data-encrypting key.

key ring
In computer security, a file that contains public keys, private keys, trusted roots, and certificates.

key-sequenced data set (KSDS)
A VSAM file or data set whose records are loaded in key sequence and controlled by an index.

keys help
A choice in the help pull-down that gives a user a list of all the shortcut key assignments for the current application.

keyword
One of the predefined words of a programming language, artificial language, application, or command. See also keyword operand, operand, parameter, positional operand.

keyword operand
An operand that consists of a keyword followed by one or more values (such as DSNAME=HELLO). See also definition statement, keyword, positional operand.

keyword parameter
A parameter that consists of a keyword followed by one or more values. See also operand.

kill In UNIX operating systems, to terminate a process.

kilobit (Kb)
For processor storage, real and virtual storage, and channel volume, 2 to the power of 10 or 1024 bits.

kilobits per second (kbps)
A measure of bandwidth on a data transmission medium, where 1 kbps = 1000 bits per second. This contrasts with units of storage where 1 Kb = 1024 bits (note upper case K).

kilobyte (KB)
For processor storage, real and virtual storage, and channel volume, 2 to the power of 10 or 1,024 bytes. For disk storage capacity and communications volume, 1,000 bytes.

KSDS See key-sequenced data set.

L

LAN See local area network.

LAN adapter
The circuit card within a communicating device that, together with its associated software, enables the device to be attached to a LAN.

LAN Adapter and Protocol Support (LAPS)
A subsystem that includes the software that manages and controls the network adapter cards, including the device drivers for those cards as well as the protocols that are used to communicate with other adapters on the network.

LAN bridge server (LBS)
In the IBM Token-Ring Network Bridge Program, the server that keeps statistical information about frames that are forwarded between two or more rings (through a bridge). The LBS sends these statistics to the appropriate LAN managers through the LAN reporting mechanism (LRM).

LANE See LAN emulation.

LAN emulation (LANE, LE)
The transparent use of an ATM network as an Ethernet-type LAN (IEEE 802.3) or a token-ring LAN (IEEE 802.5).

LAN File Services/ESA
An IBM software product used to store and share workstation-format files on MVS/ESA and VM/ESA systems.

LAN Gateway
In the AnyNet product family, a function that enables workstations residing in separate LANs to communicate across SNA or IP WANs. The AnyNet LAN Gateway supports both IPX and NetBIOS protocols across WANs. Each LAN attaches to the WAN through a LAN Gateway.

LAN segment
A section of a LAN that can be isolated by unplugging connectors from the rest of the LAN.

LAP See link access procedure.

LAPB See link access protocol balanced.

LAPS See LAN Adapter and Protocol Support.

large message performance enhancement outbound (LMPEO)
In VTAM, a facility in which VTAM reformats function management data (FMD) that exceed the maximum request unit (RU) size, as specified in the BIND, into a chain or partial chain of RUs.

Large System Performance Reference (LSPR)
A ratio that is used by IBM to assess the relative processor capacity in an unconstrained environment for specific benchmark workloads and system control programs.

last-in-chain (LIC)
A request unit (RU) whose request header (RH) end chain indicator is on and whose RH begin chain indicator is off. See also RU chain.

last-in first-out (LIFO)
A queuing technique in which the next item to be retrieved is the item most recently placed on the queue. See also first-in first-out, pushdown list.

latency
The time interval between the instant at which an instruction control unit initiates a call for data and the instant at which the actual transfer of the data starts.

layer

1. In a network architecture, a group of services, functions, and protocols that is complete from a conceptual point of view; that is one of a set of hierarchically arranged groups; and that extends across all systems that conform to the network architecture.
2. In the Open Systems Interconnection reference model, one of seven conceptually complete, hierarchically arranged groups of services, functions, and protocols, that extend across all open systems.

layout The arrangement of printed matter on a screen or page, including margins, line spacing, type specification, header and footer information, indents, and more.

layout algorithm
A method of arranging displayed or printed data.

LBS See LAN bridge server.

LCCM
See link connection component manager.

LCD See line control definer.

LCS See link connection subsystem.

LCSM See link connection subsystem manager.

LCSS See logical channel subsystem.

LDAP See Lightweight Directory Access Protocol.

LDNCB
See local device node control block.

LE See LAN emulation.

leased line
See nonswitched line.

least-weight route
In APPN, the one route calculated by topology and routing services (TRS) to have the lowest total weight after TRS compares the node characteristics and TG characteristics of each intermediate node and intermediate TG of each possible route for the class-of-service requested, and computes the total combined weight for nodes and TGs in each route. After a least-weight route is calculated between two given nodes, the result may be stored to prevent repetition of this calculation in future route selections.

LED See light-emitting diode.

LEN See low-entry networking.

LEN end node
See low-entry networking end node.

LEN node
See low-entry networking node.

LFSID See local-form session identifier.

LIC See last-in-chain.

LIFO See last-in first-out.

light-emitting diode (LED)
A semiconductor chip that gives off visible or infrared light when activated.

Lightweight Directory Access Protocol (LDAP)
An open protocol that uses TCP/IP to provide access to directories that support an X.500 model and that does not incur the resource requirements of the more complex X.500 Directory Access Protocol (DAP). For example, LDAP can be used to locate people, organizations, and other resources in an Internet or intranet directory.

limited resource
A connection facility that causes a session traversing it to be terminated if no session activity is detected for a specified period of time. See also limited-resource session.

limited-resource link
A link defined by the node operator to be a limited resource, that is, a resource to remain active only when being used. Limited-resource links are deactivated if no session activity has been detected for a specified period of time. See also limited-resource session.

limited-resource session
A session that traverses a limited-resource link. The session is terminated if no session activity is detected for a specified period of time. See also limited resource, limited-resource link.

line The physical path in data transmission.

line control definer (LCD)
A field in a VTAM/NCP line trace that indicates the type of protocol being used over the line.

line control discipline
See link protocol.

line discipline
A layer in the terminal subsystem of Unix.

line group
One or more telecommunication lines of the same type that can be activated and deactivated as a unit.

line mode
An input-processing mode in which input is collected and processed one line at a time.

line printer daemon (LPD)
A networking protocol that is used for submitting print jobs to a remote printer.

Line Printer Protocol
In the Internet suite of protocols, a protocol that is used for printing files on printers that are attached to remote hosts.

line printer requester (LPR)
A client that lets the local host submit a file for printing on a remote printer server.

line speed
The rate at which data is transmitted from one point to another over a telecommunication line.

line switching
See circuit switching.

link In SNA, the combination of the link connection (the transmission medium) and two link stations (one at each end of the link connection). See also circuit.

link access procedure (LAP)
A link level element used for data interchange between data circuit-terminating equipment (DCE) and data terminal equipment (DTE) operating in user classes of service 8 to 11, as specified in CCITT Recommendation X.1.

link access protocol balanced (LAPB)
A protocol that is used to access an X.25 network at the link level. LAPB is a duplex, asynchronous, symmetric protocol that is used in point-to-point communication.

linkage editor
A computer program for creating load modules from one or more object modules or load modules by resolving cross-references among the modules and, if necessary, adjusting addresses.

link-attached
Pertaining to devices that are connected to a controlling unit by a data link. See also channel-attached, remote.

link connection
The transmission medium that establishes the link between network nodes, for example, telephone lines, coaxial cable, and fiber optic cables.

link connection component manager (LCCM)
The transaction program that manages the configuration of the link connection.

link connection network
See connection network.

link connection segment
A portion of a configuration that is located between two resources that are listed consecutively in the service point command service (SPCS) query link configuration request list.

link connection subsystem (LCS)
The sequence of link connection components (LCCs) that belong to a link connection and are managed by a link connection subsystem manager (LCSM).

link connection subsystem manager (LCSM)
The transaction program that manages the sequence of link connection components (LCCs) that belong to a link connection.

link integrity verification tests (LIVT)
A set of operational procedures and messages that is defined by American National Standards Institute (ANSI) Standard T1.617 Annex D and International Telegraph and Telephone Consultative Committee (CCITT) Standard Q.933 Annex A and that is transferred over DLCI 0. This set of operational procedures and messages provides status and outage notification for frame-relay frame handler (FRFH) and frame-relay terminating equipment (FRTE) connections.

link layer
See data link layer.

link level
1. See data link level.
2. A part of Recommendation X.25 that defines the link protocol used to get data into and out of the network across the duplex line connecting the subscriber's equipment to the network.

link level 2 test
See link test.

link pack area (LPA)
The portion of virtual storage below 16 MB that contains frequently used modules.

Link Problem Determination Aid (LPDA)
A series of procedures used by products to test modem or other data circuit-terminating equipment (DCE) operations, and to provide information about the DCE and the data link. An extended version also provides operational and configuration commands. LPDA commands can be used only with DCEs that support LPDA.

link protocol
The rules for sending and receiving data at the link level. See also protocol.

link protocol converter (LPC)
A device that changes one type of link-level protocol information to another type of link-level protocol information for processing; for example, 5208 Link Protocol Converter, 5209 Link Protocol Converter, or ROLMbridge 5250 Link Protocol Converter.

link service access point (LSAP)
In the IBM Token-Ring Network, the logical point at which an entity in the logical link control sublayer provides services to the next higher layer.

link-state
In routing protocols, the advertised information about the usable interfaces and reachable neighbors of a router or network. The protocol's topological database is formed from the collected link-state advertisements.

link station
In VTAM, a named resource within an APPN or a subarea node that represents the connection to another APPN or subarea node that is attached by an APPN or a subarea link. In the resource hierarchy in a subarea network, the link station is subordinate to the subarea link. See also adjacent link station.

link station role
In SNA, the role that a local node assumes for a given link. Possible roles are primary (or controlling), secondary, or negotiable.

link test
In SNA, a test in which one link station returns data that is received from another link station without changing the data in order to test the operation of the link. Three tests can be made; they differ in the resources that are dedicated during the test.

list box
A control that contains a list of objects or settings choices that a user can select from.

list button
A button labeled with an underlined down-arrow that presents a list of valid objects or choices that can be selected for that field.

listener
A program that detects incoming requests and starts the associated channel.

little endian
A format for storage or transmission of binary data in which the least significant value is placed first. See also big endian.

liveness message
In High-Performance Routing (HPR), a message sent between Rapid Transport Protocol (RTP) connection endpoints when no data traffic has been detected for a given period of time. This message is used either (a) to keep the connection active when limited-resource links (with their own idleness checks) exist in the path or (b) to detect a "hung" connection, permitting a path switch to be initiated.

LIVT See link integrity verification tests.

LLB See Local Location Broker.

LLC See Logical Link Control.

LLC2 See Logical Link Control 2.

LLC protocol
See Logical Link Control protocol.

LMI See local management interface.

LMI subport
A frame-relay subport that exchanges line status information with adjacent nodes using local management interface (LMI) protocol. In NCP, the LMI subport is the link-station subport for the physical line.

LMPEO
See large message performance enhancement outbound.

load

1. To bring all or part of a computer program into memory from auxiliary storage so that the computer can run the program.
2. To place a diskette into a diskette drive.

load balancing
The monitoring of application servers and management of the workload on servers. If one server exceeds its workload, requests are forwarded to another server with more capacity.

load module
A program in a form suitable for loading into main storage for execution.

load-time dynamic linking
A mechanism that enables program modules and their external references to dynamic-link libraries to be loaded into memory when the program is loaded.

lobe In a star or ring network configuration, two pairs of conductors that provide separate send and receive paths between a wiring concentrator and a network port, such as an electrical outlet.

local Pertaining to a device, file, or system that is accessed directly from a user system, without the use of a communication line. See also remote.

local address
In SNA, an address used in a peripheral node in place of a network address and transformed to or from a network address by the boundary function in a subarea node.

local administrator
The second level of user type authority in User Profile Management. A local administrator does not have the same User Profile Management authority as an administrator user type.

local area network (LAN)
A network that connects several devices in a limited area (such as a single building or campus) and that can be connected to a larger network. See also Ethernet, metropolitan area network, token ring, token-ring network, wide area network.

local bridging
A function of a bridge program that enables a single bridge to connect multiple LAN segments without using a telecommunication link. See also remote bridging.

local device node control block (LDNCB)
A VTAM control block that represents a channel-attached non-SNA device such as a terminal.

local directory database
A set of resources (LUs) in the network known at a particular node. The resources included are all those in the domain of the node as well as any cache entries.

local distribution
A distribution to target machines in the same management region as the source machine.

local-form session identifier (LFSID)
In SNA, a dynamically assigned value used at a type 2.1 node to identify traffic for a particular session using a given transmission group.

local host
The computer to which a user's terminal is directly connected.

Local Location Broker (LLB)
In the AIX Network Computing System (NCS) Location Broker, a server that maintains information about objects on the local host and provides the Location Broker forwarding facility.

locally administered address
In a local area network, an adapter address that the user can assign to override the universally administered address.

local management interface (LMI)
The interface between the frame-relay data terminal equipment (DTE) and the frame handler, which provides the status and configuration information about the permanent virtual circuits (PVCs) available at the frame relay network.

local management interface protocol
In NCP, a set of frame-relay network management procedures and messages used by adjacent frame-relay nodes to exchange line status information over DLCI X'00'. NCP supports both the American National Standards Institute (ANSI) and International Telegraph and Telephone Consultative Committee (CCITT) versions of LMI protocol. These standards refer to LMI protocol as link integrity verification tests (LIVT).

local network
That portion of a network physically connected to the host without intermediate gateways. See also foreign network.

local non-SNA major node
In VTAM, a major node whose minor nodes are channel-attached non-SNA terminals.

local PC
In the NetView/PC program, the PC that has its keyboard locked by the remote control function. See also remote PC.

local registration file (LRF)
A file that provides information about an agent or daemon, such as the name, the location of the executable code, the names of processes dependent on the agent or daemon, and details about the objects that an agent manages.

local session identification (LSID)
In SNA, a field in a format identification 3 (FID3) field transmission header that indicates the type of session and the local address of the directly attached logical unit (LU) or physical unit (PU). See also origin address field.

local SNA major node
A major node whose minor nodes are locally attached to physical and logical units.

local topology database
A database in an APPN or LEN node containing an entry for each transmission group (TG) having at least one end node for an endpoint. In an end node, the database has one entry for each TG connecting to the node. In a network node, the database has an entry for each TG connecting the network node to an end node. Each entry describes the current characteristics of the TG that it represents. A network node has both a local and a network topology database while an end node has only a local topology database.

locate See locate seach.

locate seach
A mechanism that is used by Directory Services in an APPN node to find a resource that is not in that node. The locate search enables Directory Services to ask the Directory Services components in other APPN nodes for information on the target resource.

lock The process by which integrity of data is ensured by preventing more than one user from accessing or changing the same data or object at the same time.

logged-on operator
An operator station task that requires a terminal and a logged-on user. See also autotask.

logical channel
A path over which data flows between the network and the receiving hardware (processor, memory, or storage).

logical channel identifier
A bit string in the header of a packet that associates the packet with a specific switched virtual circuit or permanent virtual circuit.

logical channel subsystem (LCSS)
A channel subsystem structure that provides channel path and subchannel controls for configuring from one to four channel subsystem images. Each channel subsystem image can be configured with up to 256 channel paths, and each logical partition has access to one channel subsystem image.

logical character delete symbol
In VM, a special editing symbol, normally the AT (@) sign, that causes CP to delete it and the immediately preceding character from the input line. If many delete symbols are typed in consecutively, that same number of preceding characters are deleted from the input line. The value may be redefined or unassigned by the installation or user.

logical device
1. A file for conducting input or output with a physical device.
2. A file for mapping user I/O between virtual and real devices.

logical line
In NCP, the representation of the connection between NCP and a node communicating with NCP over a physical line such as token-ring or frame-relay. A single physical line can support multiple logical lines. See also physical line.

logical link
A pair of link stations, one in each of two adjacent nodes, and their underlying link connection, providing a single link-layer connection between the two nodes.

Logical Link Control (LLC)
The data link control (DLC) LAN sublayer that provides two types of DLC operation for the orderly exchange of information. The first type is connectionless service, which allows information to be sent and received without establishing a link.

Logical Link Control 2 (LLC2)
A connection-orientated layer 2 data link control protocol for SNA over a LAN.

Logical Link Control protocol (LLC protocol)
In a local area network, the protocol that governs the assembling of transmission frames and their exchange between data stations independently of the Medium Access Control protocol.

logical link control protocol data unit
A unit of information that is exchanged between link stations in different

nodes. The LLC protocol data unit contains a destination service access point (DSAP), a source service access point (SSAP), a control field, and user data.

logical partition (LP, LPAR)

1. A set of key or RID pairs in a nonpartitioning index that is associated with a particular partition.
2. One or more virtualized images of a hardware computing system that can include shared and dedicated resources assigned from the pool of resources available on a physical server. Each image appears to the operating system running within it to be a unique instance of a physical server.
3. In a partitioned database environment, a database partition server on a processor that has more than one database partition server assigned to it.

logical record

A group of logically related fields. Portions of the same logical record may be located in different physical records, and several logical records or parts of several logical records may be located in one physical record.

logical terminal (LTERM)

A message destination logically associated with a physical terminal or user. An LTERM is represented by a CNT control block.

logical unit (LU)

An entity to which Small Computer System Interface (SCSI) commands are addressed, such as a volume or managed disk (MDisk).

logic test

In TPNS, a conditional test on an input or output message, a counter, or other item using the TPNS IF statement. The IF actions can be used to control the message generation process.

login The process of signing on to a given computer system by typing in one's user ID and password.

logmode table

See logon mode table.

logoff The process of disconnecting from a computer system or network.

log off

To disconnect from a computer system or network.

logon The process of connecting to a computer system, network, or terminal session.

log on In SNA products, to initiate a session between an application program and a logical unit (LU).

logon manager

A VTAM application program that provides logon services for the Transaction Processing Facility (TPF).

logon mode

In VTAM, a subset of session parameters specified in a logon mode table for communication with a logical unit (LU). See also session parameter.

logon mode table

In VTAM programs, a set of entries for one or more logon modes.

LOGREC
See log recording data set.

log recording data set (LOGREC)
A defined storage and retrieval area that is used for logging abends and hardware failures.

long string
A variable-length string whose maximum length is greater than 254 bytes.

loop adapter
A feature of the IBM 4300 Processor family that allows the attachment of a variety of SNA and non-SNA devices. To VTAM, these devices appear as channel-attached type 2 physical units (PUs).

loopback interface
An interface that bypasses unnecessary communications functions when the information is addressed to an entity within the same system. See also loopback test.

loopback test
A test in which signals from a tester are looped at a modem or other network element back to the tester for measurements that determine or verify the quality of the communications path. See also loopback interface.

low-entry networking (LEN)
A capability of nodes to attach directly to one another using basic peer-to-peer protocols to support multiple and parallel sessions between logical units.

low-entry networking end node
A LEN node that receives network services from an adjacent APPN network node.

low-entry networking node (LEN node)
1. A node in an APPN network that uses the LU session type 6.2 node type 2.1 architecture without the APPN extension.
2. A node that provides a range of end-user services, attaches directly to other nodes using peer protocols, and derives network services implicitly from an adjacent APPN network node, that is, without the direct use of CP-CP sessions.

lower window edge
In data communication, the sequence number of the last data packet in a window.

LP See logical partition.

LPA See link pack area.

LPAR See logical partition.

LPC See link protocol converter.

LPD See line printer daemon.

LPDA See Link Problem Determination Aid.

LPR See line printer requester.

LRF See local registration file.

LSAP See link service access point.

LSID See local session identification.

LSPR See Large System Performance Reference.

LTERM
See logical terminal.

LU See logical unit.

LU 6.2 session
A session that is initiated by VTAM on behalf of a logical unit (LU) 6.2 application program, or a session initiated by a remote LU in which the application program specifies that VTAM is to control the session by using the APPCCMD macroinstruction.

LU 6.2 verb
A syntactical unit in the LU 6.2 application programming interface that represents an operation. See also verb.

LU connection test
In SNA products, a diagnostic aid that permits a terminal operator to check whether the path between a system services control point (SSCP) and a logical unit (LU) is operational.

LUC session
Communication, using LU type 0 protocols, between the LUC tasks of two Tivoli NetView for OS/390 programs. This communication is similar to an LU 6.2 conversation.

LUC task
A task that serves as the endpoint of an LUC session.

LU group
A VTAM major node type that consists of a list of model LU definitions. See also model LU.

LU-LU session
In SNA, a session between two logical units (LUs) in an SNA network. It provides communication between two end users, or between an end user and an LU services component.

LU-mode pair
In the VTAM implementation of the LU 6.2 architecture, the coupling of an LU name entry and a mode name entry. This coupling allows a pool of sessions with the same characteristics to be established.

LU-mode table
In the VTAM implementation of the LU 6.2 architecture, a data structure composed of LU-mode pairs that VTAM maintains for the application program.

LU-name entry
The entry in an LU-mode pair that contains information about the partner logical unit.

LU type
The classification of a logical unit in terms of the specific subset of SNA protocols and options that it supports for a given session. LU type specifies the values allowed in the session activation request, the usage of data stream controls, function management headers, request unit parameters, sense data values, and presentation services protocols.

M

MAC See Media Access Control.

MAC address
See Media Access Control address.

MAC frame
A transmission frame that controls the operation of the IBM Token-Ring Network and any ring station operations that affect the ring.

machine check handler (MCH)
A feature that analyzes errors and attempts recovery by retrying the failing instruction. If retry is unsuccessful, it attempts to correct the malfunction or to isolate the affected task.

machine-readable information (MRI)
All textual information contained in a program such as a system control program, an application program, or microcode. MRI includes all information that is presented to or received from a user interacting with a system. This includes messages, dialog boxes, online manuals, audio output, animations, windows, help text, tutorials, diagnostics, clip art, icons, and any presentation control that is necessary to convey information to users.

MAC protocol
1. See Media Access Control protocol.
2. See medium access control protocol.

macro An instruction that causes the execution of a predefined sequence of instructions.

macroinstruction
See macro.

MAC sublayer
See medium access control sublayer.

mail gateway
A machine that connects two or more electronic mail systems (often, mail systems on different networks) and transfers messages between them.

mainframe
A computer, usually in a computer center, with extensive capabilities and resources to which other computers may be connected so that they can share facilities.

mainline program
A program that performs primary functions, passing control to routines and subroutines for the performance of more specific functions.

main network address
In VTAM, the logical unit (LU) network address that is used for the SSCP-LU session and certain LU-LU sessions with the LU. See also auxiliary network address.

maintain system history program (MSHP)
A program used for automating and controlling various installation, tailoring, and service activities for a VSE system.

maintenance analysis procedure (MAP)
In hardware maintenance, a step-by-step procedure that assists an IBM service representative to trace a symptom to the cause of the failure.

maintenance and operator subsystem (MOSS)
A subsystem of an IBM communication controller, such as the 3725 or the 3720, that contains a processor and operates independently of the rest of the controller. It loads and supervises the controller, runs problem determination procedures, and assists in maintaining both hardware and software.

maintenance and operator subsystem extended (MOSS-E)
A subsystem of the IBM 3745 Communication Controller that operates independently of the rest of the controller. It loads and supervises the controller, runs problem determination procedures, and assists in maintaining both hardware and software.

maintenance service
In SNA, a network service in system services control points (SSCPs) and physical units (PUs). Maintenance service provides facilities for testing links and nodes and for collecting and recording error information. See also session services.

major node
In VTAM, a set of resources that can be activated and deactivated as a group. See also minor node, NCP major node, packet major node.

MAN See metropolitan area network.

managed node
In Internet communications, a workstation, server, or router that contains a network management agent. In the Internet Protocol (IP), the managed node usually contains a Simple Network Management Protocol (SNMP) agent.

managed object
A resource that is subject to management as viewed from a systems management perspective. Examples of such resources are a connection, a scalable system, or a line.

managed object class
An identified set of managed objects sharing (a) the same identified sets of attributes, notifications, and management operations (packages) and (b) the same conditions for presence of those packages.

managed system
A system that is being controlled by a given system management application. See also Hardware Management Console.

management by subscription
In a Tivoli environment, the concept of managing network resources by creating sets of profiles and distributing the profiles (through profile managers) to physical entities (Tivoli resources), called subscribers.

Management Information Base (MIB)
A definition for management information that specifies the information available from a host or gateway and the operations allowed.

Management Information Base variable (MIB variable)
A managed object that contains pertinent management information, which is accessible as defined by the access mode. The MIB variable is defined by

a textual name and the corresponding object identifier, syntax, access mode, and status, as well as a description of the semantics of the managed object. See also MIB module.

management region
The set of managed objects on a particular map that defines the extent of the network that is being actively managed. The management region may vary across Tivoli NetView maps.

management services (MS)
In SNA, one of the types of network services in control points and physical units. Management services is the service provided to assist in the management of SNA networks, such as problem management, performance and accounting management, configuration management, and change management. See also session services.

management services focal point (MSFP)
For any given management services discipline (for example, problem determination or response time monitoring), the control point that is responsible for that type of network management data for a sphere of control. This responsibility may include collecting, storing, or displaying the data, or all of these. (For example, a problem determination focal point is a control point that collects, and that may store or display, problem determination data.) See also focal point.

management services unit (MSU)
A collection of major-vector encoded management services data. The management services unit may be carried by multiple transports, including the network management vector transport (NMVT), the control point management services unit (CP-MSU), or the multiple-domain support message unit (MDS-MU). See also control point management services unit.

management station
In Internet communications, the system responsible for managing all, or a portion of, a network. The management station communicates with network management agents that reside in the managed node by means of a network management protocol, such as the Simple Network Management Protocol (SNMP).

manager role
In systems management, a role assumed by a user where the user is capable of issuing management operations and of receiving notifications.

managing system
In systems management, an open system containing a user that can assume the manager role.

mandatory cryptographic session
See required cryptographic session.

mandatory entry field
A field in which an operator must enter at least one character.

mandatory-fill field
A field that a user must leave blank, or must fill in completely.

map A set of related submaps that provides a graphical and hierarchical presentation of a network and its systems.

MAP See maintenance analysis procedure.

mapped conversation
In advanced program-to-program communications (APPC), a temporary connection between an application program and an APPC session in which the system provides all the information on how the data is formatted.

mapper
A function that records errors from resources attached to a communication controller or from certain channel-attached devices.

mapping
The process of transforming data from one format to another.

markup
Characters or other symbols that are inserted in a text or word processing file to indicate how the file should look when it is printed or displayed or to describe the document's logical structure.

markup language
A notation for identifying the components of a document to enable each component to be appropriately formatted, displayed, or used. XML is a markup language.

marshal
To copy data into a remote procedure call (RPC) packet by using a stub.

mask
1. To use a pattern of characters to control retention or elimination of portions of another pattern of characters.
2. A pattern of bits or characters that controls the keeping, deleting, or testing of portions of another pattern of bits or characters.

master cryptography key
In SNA products, a key that is used to encipher operational keys that are to be used at a node.

master terminal operator (MTO)
Any CICS operator authorized to use the master terminal functions transaction.

matching
In MPTN architecture, pertaining to the relationship between peer transport users or peer transport providers that use the same user protocols or the same transport protocols.

MAU See multistation access unit.

maximum burst size (MBS)
The maximum number of cells that an asynchronous transfer mode (ATM) endsystem can transmit at the peak cell rate. See also peak cell rate, sustainable cell rate.

maximum SSCP rerouting count
The maximum number of times that a session initiation request will be rerouted to intermediate system services control points (SSCPs) before the request reaches the destination SSCP. This count is used to prevent endless rerouting of session initiation requests.

maximum transfer unit (MTU)
The maximum number of bytes that an Internet Protocol (IP) datagram can contain.

maximum transmission unit (MTU)
The largest possible unit of data that can be sent on a given physical medium in a single frame. For example, the maximum transmission unit for Ethernet is 1500 bytes.

MB See megabyte.

Mb See megabit.

M-bit See more-data bit.

MBS See maximum burst size.

MCA See Micro Channel architecture.

MCH See machine check handler.

MCI See media control interface.

MCS See multiple console support.

MCS console
A device that can be physically attached to a global or local processor.

MDH See migration data host.

MDR See miscellaneous data record.

MDS See multiple-domain support.

MDS message unit
See multiple-domain support message unit.

mean time between failures (MTBF)
A number representing the hours between initial use and failure of an average unit in a specific population of units under specified conditions. MTBF is obtained by dividing the total number of failures into the total number of operating hours of all units.

mean time to recovery (MTTR)
The average time it takes to make a system operational after a failure.

mean time to repair
See mean time to recovery.

Media Access Control (MAC)
In networking, the lower of two sublayers of the Open Systems Interconnection model data link layer. The MAC sublayer handles access to shared media, such as whether token passing or contention will be used. See also LAN emulation.

Media Access Control address (MAC address)
A hardware address that uniquely identifies each node of a network. On a local area network (LAN), the MAC address is the unique hardware number of a computer's network adapter card.

Media Access Control protocol (MAC protocol)
In a local area network, the protocol that determines which device has access to the transmission medium at a given time.

Media Access Control sublayer
In a local area network, the part of the data link layer that applies a medium access method. The MAC sublayer supports topology-dependent functions and uses the services of the physical layer to provide services to the logical link control sublayer.

media access port
A hardware component (such as a communication adapter) of a node, which can be addressed, that gives the node access to a transmission medium and enables data to pass into and out of the node.

media control interface (MCI)
An interface that is used to control multimedia devices. Each device must have an MCI driver that implements a standard set of MCI functions. Also, each MCI driver can implement functions that are specific to a particular device.

medium
1. A physical carrier of information.
2. The material on which computer information is stored. Examples of media are diskettes, CDs, and tape.

medium access control protocol (MAC protocol)
In a local area network, the protocol that governs access to the transmission medium, taking into account the topological aspects of the network, in order to enable the exchange of data between data stations.

medium access control sublayer (MAC sublayer)
In a local area network, the part of the data link layer that applies a medium access method. The MAC sublayer supports topology-dependent functions and uses the services of the physical layer to provide services to the logical link control sublayer.

megabit (Mb)
In data communications and data tranfer, 10 to the 6th power or 1 million binary pulses.

megabyte (MB)
For processor storage, real and virtual storage, and channel volume, 2 to the 20th power or 1,048,576 bytes. For disk storage capacity and communications volume, 1,000,000 bytes.

memory
All of the addressable storage space in a processing unit and other internal storages that is used to execute instructions.

memory dump
See dump.

memory mapped I/O (MMIO)
A method of accessing an input or output port as if it were a memory location.

menu A displayed list of items from which a user can make a selection.

MERGE disk
The virtual disk in the VM operating system that contains program temporary fixes (PTFs) after the VMFMERGE EXEC is invoked. See also DELTA disk.

mesh network
A network in which there are at least two nodes with two or more paths between them.

message
An assembly of characters and sometimes control codes that is transferred as an entity from an originator to one or more recipients. A message consists of two parts: envelope and content.

message box
A secondary window that displays a message about a particular situation or condition.

Message Format Service (MFS)
An IMS editing facility that allows application programs to deal with simple logical messages instead of device-dependent data, thus simplifying the application development process.

message handling service (MHS)
An application service element that provides a generalized facility for exchanging electronic messages between systems.

message processing facility (MPF)
An MVS facility that controls message display and message processing.

message processing program (MPP)
1. A program that processes or otherwise responds to messages received from terminals.
2. An IMS application program that is driven by transactions and has access to online IMS databases and message queues.

message queue
1. A named destination to which messages can be sent until they are retrieved by programs that service the queue.
2. A set of messages that are waiting to be processed by a program or to be sent to a terminal, display, or workstation.

message style
In Tivoli Distributed Monitoring, the amount and format of information presented by certain monitors.

message switching
The process of receiving a message, storing it, and forwarding it to its destination unaltered. See also circuit switching.

message unit (MU)
In SNA, the unit of data processed by any layer; for example, a basic information unit (BIU), a path information unit (PIU), or a request/response unit (RU).

metadata
Data that describes the characteristics of data; descriptive data.

metafile
A file containing a series of attributes that set color, shape, and size, usually of a picture or a drawing. Using a program that can interpret these attributes, a user can view the assembled image.

method
In object-oriented programming, an operation that an object can perform. An object can have many methods. See also operation.

metric In Internet communications, a value that is associated with a route, which is used to discriminate between multiple exit or entry points to the same autonomous system. The route with the lowest metric is preferred.

metropolitan area network (MAN)
A network formed by the interconnection of two or more networks which may operate at higher speed than those networks, may cross

administrative boundaries, and may use multiple access methods. See also local area network, wide area network.

MFS See Message Format Service.

MHS See message handling service.

MIB See Management Information Base.

MIB application program
A systems management application program used to monitor network devices.

MIB module
In the Simple Network Management Protocol (SNMP), a collection of objects relating to a common management area. See also Management Information Base variable.

MIB object
See Management Information Base variable.

MIB tree
In the Simple Network Management Protocol (SNMP), the structure of the Management Information Base (MIB).

MIB variable
See Management Information Base variable.

MIB view
In the Simple Network Management Protocol (SNMP), the collection of managed objects, known to the agent, that is visible to a particular community.

MIB walking
In the Simple Network Management Protocol (SNMP), a technique of looking for Management Information Base (MIB) tree information when it is presented in a hierarchical format.

MIC See middle-in-chain.

Micro Channel architecture (MCA)
The rules that define how subsystems and adapters use the Micro Channel bus in a computer. MCA defines the services that each subsystem can or must provide.

microcode

1. To design, write, and test one or more microinstructions.
2. A code, representing the instructions of an instruction set, that is implemented in a part of storage that is not program-addressable.

middle-in-chain (MIC)
A request unit (RU) whose request header (RH) begin chain indicator and RH end chain indicator are both off. See also RU chain.

MIDI See Musical Instrument Digital Interface.

Mid-Level Manager (MLM)
A Systems Monitor function that performs a subset of systems and network management tasks (for example, polling, status monitoring, and node discovering) for a defined set of Simple Network Management Protocol (SNMP) devices in the network, thereby offloading these tasks from the top-level manager.

MIF See multiple image facility.

migrate
To install a new version or release of a program to replace an earlier version or release.

migration data host (MDH)
A node that acts as both an APPN end node and a type 5 subarea node. See also interchange node.

MILNET
The military network that was originally part of ARPANET. It was partitioned from ARPANET in 1984. MILNET provides a reliable network service for military installations.

minidisk
A direct access storage device (DASD) or a logical subdivision of a DASD that has its own virtual device number.

minor node
In VTAM, a uniquely defined resource within a major node. See also major node.

miscellaneous data record (MDR)
A record of a network hardware error that is recorded by the NCP and sent to the VTAM host that owns the failing component. Then VTAM writes the error on the operating system error data set.

mixed character string
A string containing a mixture of single-byte and multibyte characters.

MLM See Mid-Level Manager.

MLNB
See multi-node load balancing.

MLP See multilingual code page.

MMIO
See memory mapped I/O.

M-Motion Video Adapter/A
An IBM adapter for PS/2 system units with Micro Channel architecture that puts an analog signal on a video graphics adapter (VGA) video stream. With this adapter, full-motion video and VGA graphics and text can be displayed on a standard PS/2 color display.

mnemonic
A symbol or abbreviation chosen to help the user remember the significance or meaning of the symbol. For example, CRTUSRPRF is a mnemonic for the Create User Profile command.

mode In data communications, the set of rules and protocols to be used for a session.

model application program definition
In VTAM, an application program definition that contains a wildcard character, and that has characteristics that VTAM application programs can use when opening application control blocks (ACBs), to dynamically create application program definitions.

model LU
An LU definition that specifies the characteristics to be used for a dynamically-defined LU. See also LU group.

modem (modulator-demodulator)
A device that converts digital data from a computer to an analog signal that can be transmitted on a telecommunication line, and converts the analog signal received to data for the computer.

mode name
A name for the collection of physical and logical characteristics and attributes of a session.

mode-name entry
An entry in an LU-mode pair that contains information about the mode that is associated with the partner logical unit.

modulator-demodulator
See modem.

module
A program unit that is discrete and identifiable with respect to compiling, combining with other units, and loading.

modulo
Pertaining to a modulus; for example, 9 is equivalent to 4 modulo 5.

modulo level
The maximum number of path information units (PIUs) that a device can send before stopping to wait for a response.

modulus
In communications, a number, such as a positive integer, in a relationship that divides the difference between two related numbers without leaving a remainder. For example, 9 and 4 have a modulus of 5 (9 - 4 = 5; 4 - 9 = -5; and 5 divides both 5 and -5 without leaving a remainder).

monitor
An entity that performs measurements to collect data pertaining to the performance, availability, reliability, or other attributes of applications or the systems on which the applications rely. These measurements can be compared to predefined thresholds. If a threshold is exceeded, administrators can be notified, or predefined automated responses can be performed.

monitoring collection
A collection of predefined monitors. Administrators can also use custom-developed or third-party monitoring collections.

more-data bit (M-bit)
In X.25 communications, the bit in a data packet that indicates that there is more data to follow in another data packet, when a message is too large for one packet.

MOSS
See maintenance and operator subsystem.

MOSS-E
See maintenance and operator subsystem extended.

Motif See OSF/Motif.

mount
1. To make recording media accessible.
2. To place a data medium in a position to operate.

Moving Pictures Experts Group
The standard developed by the Moving Pictures Experts Group.

MPC See multipath channel.

MPF See message processing facility.

MPP See message processing program.

MPTN
See multiprotocol transport networking.

MPTN access node
A node that has MPTN components installed, allowing transport users to use nonnative transport providers.

MPTN connection
An end-to-end connection through the MPTN network that may traverse multiple networks running different protocols. If the network consists of multiple MPTN segments, the MPTN connection is formed by having MPTN transport gateways concatenate the MPTN segments into one logical connection.

MPTN datagram
A datagram that carries an MPTN header as part of the data.

MPTN network
A network consisting of a mixture of native nodes, MPTN access nodes, MPTN address-mapper nodes, and MPTN transport-gateway nodes. The resulting network has the appearance to the user of one logical network. An MPTN network that consists of just a single transport network does not contain an MPTN transport gateway.

MPTN-qualified transport address
A transport address that is qualified by its corresponding address type. The address conforms to the syntax and meaning of the specified address type. An example of an MPTN-qualified transport address is the pair (type=SNA, transport address=network-qualified LU name).

MPTN segment
A connection across a single-protocol transport network between an MPTN node (either an MPTN access node or gateway node) and another node that may or may not be an MPTN node.

MPTN transport gateway
An MPTN component that concatenates two or more single-protocol networks to form an integrated heterogeneous network.

MRI See machine-readable information.

MS See management services.

MSC See Multiple Systems Coupling.

MSFP See management services focal point.

MSHP
See maintain system history program.

MSU See management services unit.

MTBF See mean time between failures.

MTO See master terminal operator.

MTTR
See mean time to recovery.

MTU
1. See maximum transfer unit.
2. See maximum transmission unit.

MU See message unit.

multicast
Transmission of the same data to a selected group of destinations. See also broadcast, unicast.

multiconnection server
See concurrent server.

multidomain network
A network that consists of two or more interconnected domains.

multidrop line
See multipoint line.

multihomed host
In the Internet Protocol (IP), a host that is connected to more than one network.

multileaving
A variation of binary synchronous communication (BSC) that enables several devices to communicate concurrently over a link without using station addresses.

multilingual code page (MLP)
A code page supporting more than one language.

multilink transmission group
A transmission group that consists of a group of links. The links are viewed as a single logical link.

multi-node load balancing (MLNB)
A workload balancing function which distributes TCP/IP traffic through Cisco routers across multiple destination TCP/IP stacks.

multinode persistent session
An LU-LU session that is retained after the failure of VTAM, the operating system, or the hardware. See also persistent session.

multipath channel (MPC)
A channel protocol that uses multiple unidirectional subchannels for VTAM-to-VTAM bidirectional communication.

multiple console support (MCS)
The operations interface to z/OS systems and sysplexes.

multiple-domain support (MDS)
A technique for transporting management services data between management services function sets over LU-LU and CP-CP sessions. See also multiple-domain support message unit.

multiple-domain support message unit (MDS message unit)
The message unit that contains management services data and flows between management services function sets over the LU-LU and CP-CP sessions used by multiple-domain support. This message unit, as well as the actual management services data that it contains, is in general data

stream (GDS) format. See also control point management services unit, multiple-domain support, network management vector transport.

multiple gateways
More than one gateway that serves to connect the same two SNA networks for cross-network sessions.

multiple image facility (MIF)
A facility that allows channels to be shared among Processor Resource/Systems Manager (PR/SM) logical partitions in an ESCON environment.

Multiple Systems Coupling (MSC)
An IMS facility that permits geographically dispersed IMS systems to communicate with each other.

Multiple Virtual Storage (MVS)
An IBM operating system that accesses multiple address spaces in virtual storage. See also Base Control Program.

Multiple Virtual Storage/Operator Communication Control Facility (MVS/OCCF)
A facility that intercepts messages from the MVS supervisor. The NetView program and MVS/OCCF help a network operator control multiple MVS systems from a central site.

multiplexer channel
A channel designed to operate with a number of I/O devices simultaneously. Several I/O devices can transfer records at the same time by interleaving items of data.

multipoint connection
A connection that is established for data transmission between more than two data stations.

multipoint line
A line or circuit that connects several stations. See also point-to-point line, point-to-point network.

multipoint network
A network in which there are precisely two endpoint nodes, any number of intermediate nodes, and only one path between any two nodes.

multiprotocol node
An implementation of MPTN architecture that supports more than one transport protocol.

multiprotocol transport network
A collection of single-protocol transport networks, each using a different transport protocol.

multiprotocol transport networking (MPTN)
A networking architecture that allows application programs using common upper-layer protocols and expecting the same transport services to communicate over transport networks that may use protocols different from the transport network the programs were designed to use. For example, socket application programs that were originally designed to communicate over a TCP/IP transport network can, using MPTN support, communicate over an SNA transport network.

multistation access unit (MAU)
In the IBM Token-Ring Network, a wiring concentrator that can connect up to eight lobes to a ring.

multitail connection
Multiple simultaneous connections to the subarea network through one or more boundary nodes using independent LU protocols.

multitailed
Pertaining to a communication controller with an NCP attached to more than one host processor.

multithread application program
A VTAM application program that processes requests for more than one session concurrently.

Musical Instrument Digital Interface (MIDI)
A protocol that allows a synthesizer to send signals to another synthesizer or to a computer, or a computer to a musical instrument, or a computer to another computer.

MVS See Multiple Virtual Storage.

MVS/OCCF
See Multiple Virtual Storage/Operator Communication Control Facility.

MVS system symbol
In a sysplex where a customer runs a copy of a given program (such as CICS or the NetView program) on more than one MVS image, a symbol that the customer can use to write generic JCL for use by each instance of the given program. An MVS system symbol behaves like a program variable that the sysplex resolves at execution time with the value that is appropriate to the MVS image on which the program instance is running.

N

name binding
A relation between object classes that specifies that an object of one identified class may be the superior of an object of another identified class.

Name Binding Protocol (NBP)
In AppleTalk networks, a protocol that provides name translation function from the AppleTalk entity (resource) name (character string) into an AppleTalk IP address (16-bit number) on the transport layer.

name registry
In a Tivoli environment, a name service consisting of a two-dimensional table that maps resource names to resource identifiers and corresponding information within a Tivoli Management Region.

name resolution
In Internet communications, the process of mapping a machine name to the corresponding Internet Protocol (IP) address. See also Domain Name System.

name server
See domain name server.

name service
In a Distributed Computing Environment (DCE), the service that administers the DCE name space and provides the network binding information that is needed by a client to access the server.

namespace
A part of the model in which the names may be defined and used. Within a namespace, each name has a unique meaning.

name translation
In SNA network interconnection, the conversion of logical unit names, logon mode table names, and class-of-service names that are used in one network to equivalent names for use in another network. See also alias name.

NAT See network address translation.

National Science Foundation (NSF)
A United States government agency that is a sponsor of the National Science Foundation Network (NFSNET).

National Science Foundation Network (NSFNET)
A collection of local and regional networks in the United States that are connected by a high-speed backbone. NSFNET provides scientists access to a number of supercomputers across the country.

National Television Standard Committee (NTSC)
A committee that sets the standard for color television broadcasting and video in the United States (currently in use also in Japan).

native Pertaining to the relationship between a transport user and a transport provider that are both based on the same transport protocol.

native mode
In VTAM, a mode in which VTAM runs directly on the VM operating system rather than on a guest operating system.

native MPTN segment
An MPTN segment that spans only a single transport protocol type and does not use any MPTN flows or headers. A native MPTN segment may form part of an MPTN connection.

native network
1. In MPTN architecture, a transport network that provides the address type and transport characteristics assumed in the design of a particular transport. No MPTN address mapping or compensation protocols are used for data transfer.
2. The subnetwork whose network identifier is used by a node for its own network-qualified resource names.

native node
In MPTN architecture, a node that does not have MPTN capability.

native routing gateway
In MPTN architecture, a protocol-specific gateway that implements the same routing protocol as a given transport network.

native transport address
In MPTN architecture, a transport-user address that has an address type that corresponds to the address type that is used by the transport network underlying the transport user. For example, an SNA name that is being registered within an SNA network.

NAU
1. See network addressable unit.
2. See network accessible unit.

NAUN
See nearest active upstream neighbor.

navigate
In the NetView Graphic Monitor Facility, to move between levels in the view hierarchy.

navigation tree
A hierarchical structure that is used to access information.

NBBS See Networking Broadband Services.

NBP See Name Binding Protocol.

NCCF See Network Communications Control Facility.

NCK See Network Computing Kernel.

NCP See network control program.

NCP connectionless SNA transport (NCST)
A function that enables the network control program (NCP) to transfer TCP/IP frames across the SNA subarea routing network. The NCST session interface provides access to an LU-LU session that can transport Internet Protocol (IP) datagrams to a host that uses the SNA Network Link (SNALINK) or to another NCP that uses NCST.

NCP/EP definition facility (NDF)
A program that is part of System Support Programs (SSP) and that is used to generate a load module for a partitioned emulation program (PEP), a Network Control Program (NCP), or an Emulation Program (EP).

NCP major node
In VTAM, a set of minor nodes representing resources, such as lines and peripheral nodes, controlled by a network control program. See also major node.

NCP Packet Switching Interface
See X.25 NCP Packet Switching Interface.

NCP/Token-Ring interconnection (NTRI)
An NCP function that enables a communication controller to attach to the IBM Token-Ring Network, and that provides both subarea and peripheral node data link control (DLC) services in the SNA network.

NCS See Network Computing System.

NCST See NCP connectionless SNA transport.

NDB See Network Database System.

NDF See NCP/EP definition facility.

nearest active upstream neighbor (NAUN)
In the IBM Token-Ring Network, the station sending data directly to another station in the ring.

negative polling limit
For a start-stop (SS) or binary synchronous communication (BSC) terminal, the maximum number of consecutive negative responses to polling that the communication controller accepts before suspending polling operations.

negative response (NR)
In SNA, a response indicating that a request did not arrive successfully or was not processed successfully by the receiver. See also positive response, response header.

negotiable BIND
In SNA, a capability that allows two half-sessions to negotiate the parameters of a session when the session is being activated.

negotiable link station
The capability of a link station to assume either a primary link-station or secondary link-station role and to negotiate with a partner link station during link activation which role it will assume.

neighbor
A router on a common subnetwork that has been designated by a network administrator to receive routing information.

neighbor notification
In a token-ring network, the process by which each data station identifies the next active station so that all stations that are affected by a hard failure can be informed that a failure has occurred.

nested file package
A file package that is added as an entry to another file package.

NetBEUI
See NetBIOS Extended User Interface.

NetBIOS (Network Basic Input/Output System)
A standard interface to networks and personal computers that is used on local area networks to provide message, print-server, and file-server functions. Application programs that use NetBIOS do not have to handle the details of LAN data link control (DLC) protocols. See also basic input/output system.

NetBIOS Extended User Interface (NetBEUI)
The application programming interface (API) to the NetBIOS transport protocol.

NetDA
See Network Design and Analysis.

net ID See network identifier.

NETID
See network identifier.

NETID backbone average distance
In NetDA/2, the average path length (number of hops) in the set of shortest paths between backbone nodes in a NETID subnetwork. If more than one shortest path exists between two backbone nodes, only one of these paths is included in the set of shortest paths for calculation of the average.

NETID backbone diameter
In NetDA/2, the maximum path length (number of hops) in the set of shortest paths between backbone nodes in a NETID subnetwork.

NETID subnetwork
In NetDA/2, a group of nodes that have the same network ID. The NETID subnetwork includes all subarea and APPN subnetworks that have the same network ID.

netname
A shared resource on a server. When a netname is assigned to a resource, the user must refer to it by its netname and specify the server where the resource is located.

NetView Bridge
In Tivoli NetView for OS/390, a set of application programming interfaces (APIs) that enable Tivoli NetView for OS/390 to interact with various types of databases in the OS/390 environment.

NetView command authorization table
In the NetView program, a set of entries that define an operator's access restrictions to commands, and depending on the level of granularity that a customer chooses to instate, to command keywords and keyword values. See also command authorization.

NetView command list language
An interpretive language that is unique to the NetView program, and that is used to write NetView command lists in environments where REXX is not supported.

NetView Distribution Manager (DM, NetView DM)
A suite of IBM programs providing change management and distribution facilities.

NetView DM
See NetView Distribution Manager.

NetView Graphic Monitor Facility (NGMF)
A function of the NetView program that provides the network operator with a graphic topological presentation of a network controlled by the NetView program and that allows the operator to manage the network interactively.

NetView log
See network log.

NetView-NetView task (NNT)
In Tivoli NetView for OS/390, the task under which a cross-domain NetView operator session runs. See also operator station task.

NetView/PC application record
In the NetView/PC program, information that defines the communication path between the NetView/PC program and the host.

NetView Performance Monitor (NPM)
An IBM licensed program that collects, monitors, analyzes, and displays data relevant to the performance of a VTAM telecommunication network. It runs as an online VTAM application program.

NetView Program
An IBM licensed program that is used to monitor and manage a network and to diagnose network problems.

NetWare managed site
In a Tivoli environment, a resource that represents (a) a Novell NetWare server on which the Tivoli NetWare repeater is installed and (b) one or more clients. A NetWare managed site enables profiles to be distributed through the NetWare server to one or more specified client PCs using either TCP/IP or IPX.

network
A system of resources, such as appliances, computers, and storage devices, that are connected virtually or physically.

network accessible unit (NAU)
See network addressable unit.

network adapter
A physical device, and its associated software, that enables a processor or controller to be connected to a network.

network address
1. An identifier for a node in a network, for example an IP address. See also host name, IP address.
2. In NCS, a unique identifier (within an address family) for a specific host on a network or an internet. The network address is sufficient to identify a host, but does not identify a communication end point within the host.
3. In SNA networking, an address that consists of subarea and element fields and identifies a link, link station, or network addressable unit.

network addressable unit (NAU)
In SNA networking, any device on the network that has a network address, including logical units, physical units, and system service control points.

network address translation (NAT)
The conversion of a network address that is assigned to a logical unit in one network into an address in an adjacent network. See also alias address, real address.

network administrator
A person who defines the network configuration and other network-related information. This person controls how an enterprise or system uses its network resources.

network analyzer
A network device that is programmed to monitor and analyze all traffic data that it receives on a LAN.

network application program
In the IBM Token-Ring Network, a program that is used to connect and communicate with adapters on a network, enabling users to perform application-oriented activities and to run other application programs.

network architecture
The logical structure and operating principles of a computer network. The operating principles of a network include those of services, functions, and protocols.

Network Basic Input/Output System
See NetBIOS.

network class
An object class that is used for symbols that represent compound objects that might contain objects such as hosts and network devices. See also connector class.

network common carrier
Any organization that offers packet-switched data networks to the general public.

Network Communications Control Facility (NCCF)
A licensed program that serves as a base for command processors that can monitor, control, and improve the operation of a network.

network computing
The use of a scalable distributed computing infrastructure that encompasses the key elements of networking technologies. Examples are systems and network management; the Internet and intranets; clients and servers; application programs, databases; transaction processing; and various operating systems and communication protocols.

Network Computing Kernel (NCK)
In the Network Computing System (NCS), the combination of the remote procedure call (RPC) runtime library and the Location Broker, which provide the function necessary required to run distributed applications.

Network Computing System (NCS)
A set of software tools that conform to the Network Computing Architecture. These tools include the Remote Procedure Call runtime library, the Location Broker, and the NIDL compiler.

network controller
A concentrator and protocol converter that is used with SDLC links. By converting protocols, which manage the way that data is sent and received, the IBM 3710 Network Controller enables the use of non-SNA devices with an SNA host processor.

network control mode
The mode in which a network control program can direct a communication controller to perform such activities as polling, device addressing, dialing, and answering. See also emulation mode.

network control program (NCP)
A program that controls the operation of a communication controller. See also emulation program.

network control program generation
The process, performed in a host processor, of validating, assembling, and link-editing network definition statements to produce a network control program.

network convergence
The act of updating the topology database of all attached routing nodes to reflect the addition, deletion, or changes to the reachability and metrics of a network resource. The updating is accomplished through the exchange of topology messages.

Network Database System (NDB)
The part of TCP/IP that uses the remote procedure call (RPC) protocol to allow interoperability among a variety of workstation users and a mainframe relational database system. It provides access to a mainframe relational database from workstations and mainframes and allows users to issue SQL statements interactively, or to invoke NDB services from within a C application program. NDB services can then be used to pass SQL statements to a DB2 or SQL/DS system and to handle responses from the DB2 or SQL/DS system.

Network Design and Analysis (NetDA)
A host-based IBM licensed program for designing and analyzing networks.

Its major functions are network definition, performance and availability analysis, route generation and explicit route (ER) numbering, and path-statement generation.

network directory database
See distributed directory database.

network element
In the Simple Network Management Protocol (SNMP), a gateway, router, or host that contains management agents responsible for performing the network management functions requested by the network management stations.

Network File System (NFS)
A protocol, developed by Sun Microsystems, Incorporated, that allows a computer to access files over a network as if they were on its local disks.

network gateway accounting (NGA)
The Tivoli NetView Performance Monitor subsystem that receives traffic information from the gateway network control program (NCP) for sessions that flow throughout a network.

network ID
See network identifier.

network identifier (NID)
1. The network ID that is assigned by IMS or CICS, or if the connection type is RRSAF, the RRS unit of recovery ID (URID).
2. In TCP/IP, that part of the IP address that defines a network. The length of the network ID depends on the type of network class (A, B, or C).

Network Information Center (interNIC, NIC)
In networking, an organization at SRI International that provides information about TCP/IP and the Internet. NIC assigns Internet addresses and acts as the repository for all Requests for Comments and TCP/IP documentation and policies.

network information services (NIS)
A set of UNIX network services (for example, a distributed service for retrieving information about the users, groups, network addresses, and gateways in a network) that resolve naming and addressing differences among computers in a network.

Networking Blueprint
An open, highly modular framework for networking support using industry-wide standards. The Networking Blueprint (a) incorporates multiple protocols and multiple vendor components; (b) enables comprehensive systems management and application choices independent of the network; and (c) facilitates the support of new technologies.

Networking Broadband Services (NBBS)
An IBM architecture for high-speed networking that complements the asynchronous transfer mode (ATM) standards and provides access services, transport services, and network control for user traffic.

network interface card (NIC)
A printed circuit board that plugs into a personal computer, server, or workstation. It controls the exchange of data over a network and provides the electronic functions for the data-link protocol or access method, such as token ring or Ethernet.

network interface controller (NIC)
Hardware that provides the interface control between system main storage and external high-speed link (HSL) ports.

Network Interface Definition Language (NIDL)
A declarative language for the definition of interfaces that has two forms, a Pascal-like syntax and a C-like syntax. NIDL is a component of the Network Computing Architecture.

network job entry (NJE)
In object distribution, an entry in the network job table that specifies the system action required for incoming network jobs sent by a particular user or group of users. Each entry is identified by the user ID of the originating user or group.

network layer
In OSI architecture, the layer that provides services to establish a path between open systems with a predictable quality of service.

network layer packet (NLP)
A message unit used to carry data between High-Performance Routing (HPR) nodes.

network log
A file that contains (a) messages, commands, and command procedures that have been processed by monitoring and management software and (b) output resulting from commands, command procedures, and other activity occurring within monitoring and management software.

Network Logical Data Manager (NLDM)
A program that collects and interprets records of errors detected in a network and suggests possible solutions. NLDM consists of commands and data services processors that comprise the Netview software monitor component.

network management
The process of planning, organizing, and controlling a communications-oriented system.

network management gateway (NMG)
A gateway between the SNA network management system and the network management function of one or more non-SNA networks.

network management station (NMS)
In the Simple Network Management Protocol (SNMP), a station that executes management application programs that monitor and control network elements.

network management vector transport (NMVT)
A management services request/response unit (RU) that flows over an active session between physical unit management services and control point management services (SSCP-PU session). See also control point management services unit, multiple-domain support message unit.

network manager
A program or group of programs that is used to monitor, manage, and diagnose the problems of a network.

network name
1. In SNA, a symbolic name by which end users refer to a network addressable unit (NAU), a link station, or a link. See also ACB name, network name.

2. See also network name.

network node (NN)

network node control point (NNCP)
A control point that provides session and routing services to adjacent end nodes.

network node domain
An APPN network node and its served end nodes.

network node server
An APPN network node that provides network services for its local logical units and adjacent end nodes.

network operations center (NOC)
Any center that has responsibility for the operational aspects of a production network. Examples of NOC tasks are monitoring and control, troubleshooting, and user assistance.

network operator
A person who controls the day-to-day operation of all or part of a network. See also domain operator.

network performance analysis logical unit (NPALU)
A logical unit (LU) defined in the network control program (NCP) that is used to collect performance data from the NCP.

Network Print Facility (NPF)
A feature that routes VTAM, JES2, or JES3 printer output to printers in a TCP/IP network.

Network Problem Determination Application (NPDA)
A program that collects and interprets records of errors detected in a network and suggests possible solutions. NPDA consists of commands and data services processors that comprise the Netview hardware monitor component.

network product support (NPS)
The function of the NetView program that provides operations control for the IBM 3710 Network Controller, the 5860 family of modems, and the NCP and provides configuration of 3710s and the 5860 family of modems. NPS provides operator commands for running diagnostics for link problem determination and for changing product operating parameters.

network protocol
A communication protocol from the Network Layer of the Open Systems Interconnect (OSI) network architecture, such as the Internet Protocol (IP).

network-qualified name
In SNA, a name that uniquely identifies a specific resource, such as a logical unit (LU) or control point (CP), within a specific network. A network-qualified name consists of a network identifier and a resource name, each of which is a symbol string that is 1 to 8 bytes.

Network Routing Facility (NRF)
A licensed program that runs under the control of the Network Control Program and uses a System/370 backbone network. The network routing facility provides primary logical unit support and a path for data between a display station and an application without using the System/370 host system.

network service access point (NSAP)
The point at which network services are provided by a network entity to a transport entity according to the OSI reference model. NSAP addresses are assigned by a hierarchy of registration authorities so that each valid NSAP address provides a globally unambiguous identification of one system. One system can have multiple NSAP addresses.

network services (NS)
1. The session services (directory and route-selection functions) and management services provided by an APPN network-node control point to its domain.
2. The services within network addressable units that control network operation through SSCP-to-SSCP, SSCP-to-PU, SSCP-to-LU, and CP-to-CP sessions.

network services header
In SNA, a 3-byte field in a function management data (FMD) request/response unit (RU) flowing in an SSCP-LU, SSCP-PU, or SSCP-SSCP session. The network services header is used primarily to identify the network services category of the request unit (RU) (for example, configuration services and session services) and the particular request code within a category.

network session accounting (NSA)
The Tivoli NetView Performance Monitor subsystem that receives session accounting information from the network control program (NCP) for sessions that flow throughout a network.

Network Terminal Option (NTO)
An IBM licensed program, used in conjunction with NCP, that allows certain non-SNA devices to participate in sessions with SNA application programs in the host processor. When data is sent from a non-SNA device to the host processor, NTO converts non-SNA protocol to SNA protocol; and when data is sent from the host processor to the non-SNA device, NTO converts SNA protocol to non-SNA protocol.

network terminating unit (NTU)
In X.25 communications, the point of access to a network.

network-to-network interface (NNI)
In an asynchronous transfer mode (ATM) network, the interface between nodes (switches).

network topology database
The representation of the current topology of the intermediate routing portion of the APPN network. The network topology database contains entries for network nodes and the transmission groups interconnecting them. Each entry describes the current characteristics of the node or transmission group that it represents. The topology database is used to determine the preferred session route between two end nodes for a given class of service.

network user address (NUA)
In X.25 communications, the X.121 address containing up to 15 binary code digits.

network user identification (NUI)
In X.25, the network specific information that enables the transmitting data terminal equipment (DTE) to provide billing, security, or management

information on a per-call basis to the data circuit-terminating equipment (DCE). The NUI can identify a network user independently of the port being used.

NFS See Network File System.

NFS client
A program or system that mounts remote file directories from another host called a Network File System (NFS) server.

NFS server
A program or system that allows authorized remote hosts called Network File System (NFS) clients to mount and access its local file directories.

NFY See NOTIFY.

NGA See network gateway accounting.

NGMF
See NetView Graphic Monitor Facility.

NIB See node initialization block.

NIB list
A series of contiguous node initialization blocks.

NIC

1. See network interface controller.
2. See Network Information Center.
3. See network interface card.

NID See network identifier.

NIDL See Network Interface Definition Language.

NIS See network information services.

NJE See network job entry.

NLDM
See Network Logical Data Manager.

NLP See network layer packet.

NMG See network management gateway.

NMS See network management station.

NMVT
See network management vector transport.

NN See network node.

NNCP See network node control point.

NNI See network-to-network interface.

NNT See NetView-NetView task.

NOC See network operations center.

node In a network, a point at which one or more functional units connect channels or data circuits.

node disjoint
In NetDA/2, pertaining to routes, virtual routes (VRs), or permanent virtual circuits (PVCs) between two nodes that share no common intermediate nodes.

node initialization block (NIB)
In VTAM, a control block associated with a particular node or session that contains information used by the application program to identify the node or session and to indicate how communication requests on a session are to be handled by VTAM.

node name
The name assigned to a node during network definition.

node type
The designation of a node according to the protocols it supports or the role it plays in a network. Examples of Advanced Peer-to-Peer Networking (APPN) node types are network node and end node.

nonblocking mode
A way of requesting a service over an interface so that if the request cannot be completed immediately, the requesting process is able to continue and is not suspended. See also blocking mode.

noncanonical address
In LANs, a format for the transmission of medium access control (MAC) addresses for token-ring adapters. In noncanonical format, the most significant (leftmost) bit of each address byte is transmitted first. See also canonical address.

nonce A binary value that is not repeatable by a generating program over a long period of time. It can be a counter or a random value.

nonescaping key
A key that allows a character to be typed without the presentation position being changed. Nonescaping keys are used for building an accented character.

nongeneric alert
In SNA management services (SNA/MS), alert information that is encoded such that it conveys to the receiver the set of screens that should be displayed for the network operator when the alert is received. The use of nongeneric alerts requires that the receiver recognize and understand each unique problem for which an alert is sent. See also generic alert.

nonmatching
In MPTN architecture, pertaining to the relationship between peer transport users or peer transport providers that use different protocols.

nonnative
In MPTN architecture, pertaining to the relationship between a transport user and a transport provider that are based on different transport protocols.

nonnative MPTN segment
A segment of an MPTN connection in which an MPTN protocol was used to establish the segment.

nonnative network

1. A subnetwork whose network identifier differs from the network identifier that a node uses for its own network-qualified resource names.
2. In MPTN architecture, with respect to a particular transport user, a transport network whose addressing structure and transport service are different from that assumed in the design of that transport user.

3. Any network attached to a gateway NCP that does not contain that NCP's resources.

nonnative network connection
A connection in which an APPN or LEN node and the subarea to which it connects use different network identifiers.

nonpersistent session
A session that is terminated if it remains inactive for a user-specified time.

nonsecure interface
For security gateways, the physical layer connection between the gateway and a nonsecure network.

nonsecure network
A set of nodes that are not controlled by a single administrative party. See also secure network.

nonseed router
In AppleTalk networks, a router that acquires network number range and zone list information from a seed router that is attached to the same network.

Non-SNA Interconnection
An IBM licensed program that provides format identification (FID) support for selected non-SNA facilities. Thus, it allows SNA and non-SNA facilities to share SDLC links. It also allows the remote concentration of selected non-SNA devices along with SNA devices.

nonswitched connection
A connection that does not have to be established by dialing. See also switched connection.

nonswitched data link
A connection between a link-attached device and a communication controller that does not have to be established by dialing.

nonswitched line
A connection between computers or devices that does not have to be made by dialing. See also switched line.

nontransparent mode
A mode of binary synchronous transmission in which all transmission control characters are treated as transmission control characters rather than as text. See also transparent mode.

nonvolatile storage
A storage device whose contents are not lost when power is cut off.

no response
In SNA, a value in the form-of-response-requested field of the request header that directs the receiver of the request not to return any response, regardless of whether or not the request is received and processed successfully. See also definite response, exception response.

normal flow
In SNA, a data flow designated in the transmission header (TH) that is used primarily to carry end-user data. The rate at which requests flow on the normal flow can be regulated by session-level pacing. Normal and expedited flows move in both the primary-to-secondary and secondary-to-primary directions. See also expedited flow.

notebook
In graphical user interfaces (GUIs), a control that resembles a tabbed notebook, with multiple pages that can be accessed individually in any order.

notice In a Tivoli environment, a message generated by a systems management operation that contains information about an event or the status of an application. Notices are stored in notice groups.

notice group
In a Tivoli environment, an application- or operation-specific container that stores and displays notices that pertain to specific Tivoli functions.

notification
1. An unscheduled, spontaneously generated message, issued by an agent when a significant or critical (data) condition occurs.
2. Information, labeled as a managed object, that relates to an event that has occurred within the managed object.

NOTIFY (NFY)
A network services request that is sent by a system services control point (SSCP) to a logical unit (LU) to inform the LU of the status of a procedure requested by the LU.

NPALU
See network performance analysis logical unit.

NPDA
See Network Problem Determination Application.

NPF See Network Print Facility.

NPM See NetView Performance Monitor.

NPS See network product support.

NPSI See X.25 NCP Packet Switching Interface.

NR See negative response.

NRF See Network Routing Facility.

NS See network services.

NSA See network session accounting.

NSAP See network service access point.

NSF See National Science Foundation.

NSFNET
See National Science Foundation Network.

NTO See Network Terminal Option.

NT repeater
In a Tivoli environment, the first Windows NT machine on which the Tivoli Remote Execution Service is installed. Using fanout, the NT repeater distributes the Tivoli Remote Execution Service to all other NT clients during the client installation process.

NTRI See NCP/Token-Ring interconnection.

NTSC See National Television Standard Committee.

NTSC format
The specifications for color television as defined by the NTSC committee, which include: (a) 525 scan lines, (b) broadcast bandwidth of 4 MHz, (c) line frequency of 15.75 KHz, (d) frame frequency of 30 frames per second, and (e) color subcarrier frequency of 3.58 MHz. See also phase alternation line.

NTU See network terminating unit.

NTuneMON
A program that runs with the NetView program and monitors NCPs that were activated by the VTAM on the host where NTuneMON is running.

NTuneNCP
A feature of NTuneMON that runs in a communication controller and, with VTAM, enables a network administrator to tune NCP interactively.

NUA See network user address.

NUI See network user identification.

null resource
In the NetView Graphic Monitor Facility, an object that is used only as an aid in formatting and drawing a view. A null resource always shows the status "unknown."

Nways family
A group of IBM switched networking hardware products plus the software that uses or manages these products.

O

OAF See origin address field.

object

1. In object-oriented design or programming, a concrete realization (instance) of a class that consists of data and the operations associated with that data. An object contains the instance data that is defined by the class, but the class owns the operations that are associated with the data.
2. Any digital content that a user can manipulate as a single unit to perform a task. An object can appear as text, an icon, or both.

object code
Machine-executable instructions, usually generated by a compiler from source code written in a higher level language. Object code might itself be executable or it might require linking with other object code files.

object ID
See object identifier.

object identifier (object ID)
An ISO-defined format for identifying elements within an OSI network. An object ID consists of a string of integers. The integers in the string can identify a particular standards body, an enterprise, or the type or value of an object. An object ID is intended to be a universal identifier of an object. Examples of values that are specified in object ID format are abstract syntaxes, application context names, and application process titles.

Object Management Group (OMG)
A non-profit consortium whose purpose is to promote object-oriented

technology and the standardization of that technology. The Object Management Group was formed to help reduce the complexity, lower the costs, and hasten the introduction of new software applications.

object path
In a Tivoli environment, an absolute or relative path to a Tivoli object, similar to paths in file systems.

object reference
In a Tivoli environment, the object identifier (OID) that is given to an object during its creation.

object registration service (ORS)
In Tivoli NetView, a component that creates and maintains a global directory of object managers, their locations, and their protocols. The postmaster daemon uses this directory to route messages and provide location transparency for managers and agents.

Object Request Broker (ORB)
In object-oriented programming, software that serves as an intermediary by transparently enabling objects to exchange requests and responses.

OBR See outboard record.

OCCF See Operator Communication Control Facility.

octal Pertaining to a fixed-radix numeration having a radix of eight.

octet A byte composed of eight binary elements.

ODAI See origin-destination assignor indicator.

ODLC See outboard data link control.

OEM See original equipment manufacturer.

OfficeVision Series
IBM's family of office application programs that can be used for office tasks such as creating, sending, receiving, and filing electronic mail.

Offload host
Any device that handles the TCP/IP processing for the host where TCP/IP with the Offload feature is installed.

offload system
The system that contains the Offload host and the host where the TCP/IP with the Offload feature is installed.

offset The number of measuring units from an arbitrary starting point to some other point.

OIC See only-in-chain.

OLTP See online transaction processing.

OLU See origin logical unit.

OMG See Object Management Group.

OMPROUTE server
The routing daemon on z/OS that is capable of handling both OSPF and RIP interfaces concurrently.

one-way bracket
A bracket in which data is sent from one NAU to another in a single chain with begin bracket, conditional end bracket, and exception response

requested. When one-way brackets are used on CP-CP sessions, they are always sent on the contention-winner session.

one-way communication
Data communication in which data is transferred in one preassigned direction.

one-way conversation
A conversation in which data is sent from one transaction program (the source) to another (the target) with no response requested and that is released after the data is sent. If the source TP terminates as soon as it releases the conversation, the data may still be in transit; thus, the source and target TPs are not necessarily active at the same time.

one-way message delay
The time elapsed from the moment that a message is sent from its origin until it reaches its destination.

online information
Information on the display screen that explains displays, messages, and programs.

online transaction processing (OLTP)
A type of interactive application in which requests that are submitted by users are processed as soon as they are received. Results are returned to the requester in a relatively short period of time.

only-in-chain (OIC)
A request unit for which the request header (RH) begin chain indicator and RH end chain indicator are both on. See also RU chain.

open destination (OPNDST)
A VTAM macroinstruction that requests VTAM establish a session between an SNA application program and an LU, with the application program acting as the primary LU.

Open Secure Shell (OpenSSH)
A set of open-source programs that implement the SSH protocol.

Open Shortest Path First (OSPF)
A link-state routing protocol that was developed for IP networks and is based on the Shortest Path First (SPF) algorithm. Open Shortest Path First is an Interior Gateway Protocol.

Open Software Foundation (OSF)
A nonprofit research and development organization with these goals: to develop specifications and software for use in an open software environment; and to make the specifications and software available to information technology vendors under fair and equitable licensing terms.

OpenSSH
See Open Secure Shell.

open system
A system that complies with industry-defined interoperability standards. An open system can be connected to other systems complying with the same standards.

Open Systems Adapter (OSA)
An integrated IBM mainframe hardware feature that combines the

functions of an I/O channel with the functions of a network port to provide direct connectivity between mainframe applications and their clients on the attached network.

open systems interconnection (OSI)
The interconnection of open systems in accordance with standards of the International Organization for Standardization (ISO) for the exchange of information.

open systems interconnection architecture (OSI architecture)
Network architecture that adheres to the particular set of ISO standards relating to Open Systems Interconnection.

open systems interconnection reference model (OSI-RM)
The seven-layer basic reference model that ISO 7498 (CCITT X.200) uses to describe how open systems should act and interact. The three primary kinds of interactions described in that reference model are the interactions: (a) inside layers, (b) between layers, and (c) between open systems.

operable time
The time during which a functional unit would yield correct results if it were operated.

operand
1. Information entered with a command name that defines the data on which a command processor operates and that controls the running of the command processor. See also definition statement, keyword, keyword parameter, parameter.
2. An entity on which an operation is performed.

operating system (OS)
A collection of system programs that control the overall operation of a computer system.

Operating System/Virtual Storage (OS/VS)
A family of operating systems that control IBM System/360 and System/370 computing systems. OS/VS includes VS1, VS2, MVS/370, MVS/XA, and MVS/ESA.

operation
In object-oriented design or programming, a service that can be requested at the boundary of an object. Operations include modifying an object or disclosing information about an object.

operations and administration
The Tivoli management discipline that addresses the automation of activities that ensure the operational integrity and reliability of a network computing system. See also availability management, deployment management, security management.

Operator Communication Control Facility (OCCF)
An IBM licensed program that allows communication with and the operation of remote MVS or VSE systems.

operator profile
A specification of the resources and activities over which a network operator has control. The profile is stored in a file that is activated when the operator logs on.

operator station task (OST)
In Tivoli NetView for OS/390, the task that establishes and maintains the

online session with the network operator. There is one operator station task for each network operator who logs on to Tivoli NetView for OS/390.

OPNDST
See open destination.

optical reflective disc
An optical video disc that is read by means of the reflection of a laser beam from the shiny surface on the disc.

option set
A set of functions that may be supported by products that implement a particular architecture. A product may support any number of option sets or none. For each option set supported, all functions in that set are supported. See also base set.

ORB See Object Request Broker.

orderly closedown
The orderly deactivation of VTAM and its domain. An orderly closedown does not complete until all application programs have closed their access method control blocks (ACBs). Until then, RPL-based operations continue; however, no new sessions can be established, and no new ACBs can be opened. See also cancel closedown, quick closedown.

origin An external logical unit (LU) or application program from which a message or other data originates. See also destination.

origin address field (OAF)
In SNA, a field in a format identification 0 (or format identification 1) transmission header that contains the network address of the originating location. In a format identification 2 heading, the field is called origin address field prime (OAF'). See also destination address field, format identification field, local session identification.

original equipment manufacturer (OEM)
A manufacturer of equipment that can be marketed by another manufacturer.

origin-destination assignor indicator (ODAI)
A bit in a FID2 transmission header that is used to divide the address space so that an address space manager (ASM) in one node may use all possible combinations of OAF', DAF' with the ODAI having one setting and the ASM in the adjacent node may use all possible combinations of OAF', DAF' with the ODAI having the complementary setting.

origin logical unit (OLU)
A logical unit that is the source of a Locate search request as part of a session initiation sequence. See also destination logical unit, initiating logical unit.

origin subarea field (OSAF)
In SNA, a field in a FID4 transmission header that contains a subarea address which, combined with the element address in the origin element field (OEF), gives the complete network address of the originating network addressable unit (NAU).

ORS See object registration service.

OS See operating system.

OSA See Open Systems Adapter.

OSAF See origin subarea field.

oserv The Tivoli service that is used as the object request broker (ORB). This service runs on the Tivoli management region server and each managed node.

OSF See Open Software Foundation.

OSF/Motif
A graphical interface that contains a toolkit, a presentation description language, a window manager, and a style guideline.

OSI See open systems interconnection.

OSI architecture
See open systems interconnection architecture.

OSI management
1. The facility to control, coordinate, and monitor the resources that allow communications to take place in the OSI environment.
2. The set of standards that are produced by ISO/IEC/CCITT for managing OSI.

OSI-RM
See open systems interconnection reference model.

OSN See output sequence number.

OSPF See Open Shortest Path First.

OST See operator station task.

OS/VS
See Operating System/Virtual Storage.

other-domain resource
See cross-domain resource.

outboard data link control (ODLC)
Data link control (DLC) processing performed by a coprocessor.

outboard record (OBR)
A record originated by I/O and communication components and supported by the access methods. It describes permanent errors or reports statistical data.

outbound
In communication, pertaining to data that is sent to the network. See also inbound.

outbound filter
A filter that is applied to frames flowing from a port onto a transmission link or LAN.

output
Pertaining to a device, process, or channel involved in an output process, or to the associated data or states.

output device
A physical device that a computer uses to present data to a user.

output sequence number (OSN)
A number assigned by a system to a message sent by the system.

output unit
See output device.

overlay
A collection of predefined data, such as lines, shading, text, boxes, or logos, that can be merged with variable data on a page or form while printing.

P

PAB See process anchor block.

PAC See privilege attribute certificate.

pacing
In SNA, a technique by which the receiving system controls the rate of transmission of the sending system to prevent overrun. See also flow control.

pacing group
See pacing window.

pacing response
In SNA, an indicator that signifies the readiness of a receiving component to accept another pacing group. The indicator is carried in a response header (RH) for session-level pacing and in a transmission header (TH) for virtual route pacing. See also response header.

pacing window
1. The requests that can be transmitted on the normal flow in one direction on a session before a session-level pacing response is received, indicating that the receiver is ready to accept the next group of requests.
2. The path information units (PIUs) that can be transmitted on a virtual route before a virtual-route pacing response is received, indicating that the virtual route receiver is ready to receive more PIUs on the route.

package
A collection of attributes, notifications, operations, or behaviors that are treated as a single module in the specification of a managed object class. Packages can be mandatory or conditional when referenced in a definition of a managed object class.

packet In data communication, a sequence of binary digits, including data and control signals, that are transmitted and switched as a composite whole. See also frame.

packet assembler/disassembler (PAD)
A functional unit that enables data terminal equipment (DTE) not equipped for packet switching to use a packet-switched network.

packet level
1. A part of X.25 communications that defines the protocol for building logical connections between two DTEs and for moving data on these connections. See also data link level, physical level.
2. The packet format and control procedures for exchange of packets containing control information and user data between data terminal equipment (DTE) and data circuit-terminating equipment (DCE).

packet level interface
In packet mode operation, the level of the interface between data terminal

equipment (DTE) and data circuit-terminating equipment (DCE) associated with the exchange of data and signals contained in packets.

packet major node
In VTAM, a set of minor nodes representing resources, such as switched virtual circuits and permanent virtual circuits, attached through an X.25 port. See also major node.

packet mode operation
See packet switching.

packet mode terminal
Data terminal equipment that can control, format, transmit, and receive packets.

packet modulo
The highest sequence number the packet level uses before resetting the count and beginning the count again.

packet sequence number
A number in a packet header by which the packet level protocol can determine whether packets have been lost. It also provides the count for the acknowledgment response.

packet sequencing
A process of ensuring that packets are delivered to the receiving data terminal equipment (DTE) in the same sequence in which they were transmitted by the sending DTE.

packet size
In X.25 communications, the length of the user data in a data packet.

packet-switched data transmission service
A user service that transmits and, if necessary, assembles and disassembles data in the form of packets. See also circuit-switched data transmission service.

packet switching
The act of sending and routing packets of data from source to destination based on information contained in their header record. See also circuit, circuit switching, X.25.

packet switching data network (PSDN)
1. An interconnecting set of switching nodes that enables subscribers to exchange data using standard protocol and packet-switching technology. This type of network carries messages divided into packets over circuits that are shared by many network users.
2. A communications network that uses packets to send data.

packet window
The maximum number of consecutive data packets that are allowed to flow between a data terminal equipment (DTE) and a data circuit-terminating equipment (DCE) before an acknowledgment is received for a given logical channel.

PAD See packet assembler/disassembler.

page
1. A fixed-length block of instructions, data, or both instructions and data that can be transferred between active physical memory and external page storage.

2. The information that can be displayed at one time on the screen of a display device or in a window.

page definition
An Advanced Function Presentation (AFP) resource that defines the rules for transforming line data and XML data into Mixed Object Document Content Architecture-Presentation (MO:DCA-P) data and text controls.

page segment
An AFP resource object containing text, image, graphics, or bar code data that can be positioned on any addressable point on a page or an electronic overlay. See also segment.

pair set
In NetDA/2, a set of node pairs between which routes are to be generated.

pair set expression
In NetDA/2, a user specification that defines a set of node pairs.

PAL See phase alternation line.

palette
A range of graphically displayed choices, such as colors or collections of tools, that can be selected in an application.

Palladium
A distributed print system developed by MIT's Project Athena with participation from Digital Equipment Corporation (DEC), International Business Machines (IBM), and Hewlett-Packard (HP). It is a reference implementation for the OSI Document Printing Application (DPA) standard (ISO/IEC 10175).

parallel
Pertaining to concurrent or simultaneous operation of two or more devices or to concurrent performance of two or more activities in a single device. See also serial.

parallel bridges
A pair of bridges that are connected to the same LAN segment, which create redundant paths to the segment.

parallel channel
A channel having a System/360 and System/370 channel-to-control-unit I/O interface that uses bus-and-tag cables as a transmission medium. See also ESCON channel.

parallel data field (PDF)
A character buffer used in an NCP line trace record.

parallel link
Two or more links between adjacent subarea nodes.

parallel port
An access point through which a computer transmits or receives data that consists of several bits sent simultaneously on separate wires.

parallel session
Two or more concurrently active sessions between the same two network addressable units using different pairs of network addresses or local-form session identifiers. Each session can have independent session parameters.

Parallel Sysplex
1. A sysplex that uses one or more coupling facilities.

2. A set of z/OS systems that communicate and cooperate with each other through multisystem hardware components and software services to process customer workloads.

parallel transmission group
Multiple transmission groups that are between adjacent nodes, with each group having a distinct transmission group number.

parameter (parm)
A value or reference passed to a function, command, or program that serves as input or controls actions. The value is supplied by a user or by another program or process. See also configuration file, keyword, operand.

parameters
In NetDA/2, the set of restrictions that affect only the output of a network design. A change in a parameter value does not change the input to the network design. See also constraint.

parent A process that has spawned a child process using the fork primitive. See also child.

parent process
A process that is created to carry out a request or set of requests. The parent process, in turn, can create child processes to process requests for the parent.

parent resource
In the NetView Graphic Monitor Facility, a resource that has one or more child resources below it in a hierarchy.

parity bit
A binary digit added to a group of binary digits to make the sum of all the digits either always odd (odd parity) or always even (even parity).

parm See parameter.

parmlib
All of the members in the SYS1.PARMLIB partitioned data set that contain parameters setting the limits and controlling the behavior of z/OS.

parse To break down a string of information, such as a command or file, into its constituent parts.

partially meshed network
A network in which some, but not all, routing and switching points are directly connected to every other routing or switching point. See also fully meshed network.

partition
A logical division of storage on a fixed disk.

partitioned data set (PDS)
A data set on direct access storage that is divided into partitions, called members, each of which can contain a program, part of a program, or data.

partitioned emulation programming (PEP)
A function of a network control program that enables a communication controller to operate some telecommunication lines in network control mode while simultaneously operating others in emulation mode.

partitioned emulation programming extension (PEP extension)
A function of a network control program that enables a communication

controller to operate some telecommunication lines in network control mode while simultaneously operating others in emulation mode.

partner-LU verification
For logical unit (LU) 6.2, a three-flow exchange between two LUs with each LU using an LU-LU password and the Data Encryption Standard (DES) algorithm. The three-flow exchange is the LU-LU verification.

passive open
In TCP/IP, the state of a connection that is prepared to provide a service on demand. See also active open.

pass-through
See display station pass-through.

pass-through simulation
In TPNS, the role that TPNS performs of a packet switching network to allow communication between real data terminal equipment (DTEs)

pass-through virtual circuit
In TPNS, a virtual circuit on which TPNS performs the role of a packet switching network, and does not simulate either of the data terminal equipment (DTEs).

password substitution
In advanced program-to-program communication (APPC), the use of an encrypted form of a user's password in a session-activation request.

patch cable
A length of cable with data connectors at both ends; it is normally used to interconnect two sections of building cable at a distribution panel or to connect a product to the building cable.

path
1. In the NetView/PC program, a complete line in a configuration that contains all of the resources in the service point command service (SPCS) query link configuration request list.
2. The series of transport network components (path control and data link control) that are traversed by the information exchanged between two network accessible units.
3. In a network environment, the route between any two nodes.
4. The route through a file system to a specific file. See also explicit route, route extension, virtual route.
5. In SNA, the set of data links, data link control layers, and path control layers that a path information unit travels through when sent from the transmission control layer of one half-session to the transmission control layer of another half-session.

path block
In the NetView/PC program, a block of storage that contains the link connection component (LCC) information for all LCCs in one path.

path control (PC)
In SNA, a transport function for routing message units between network accessible units in the network.

path control network
See transport network.

path cost
In link-state routing protocols, the sum of the link costs along the path between two nodes or networks.

path information unit (PIU)
In SNA, the smallest amount of data that the system sends out on a communications line, consisting of a transmission header followed by a basic information unit or a basic information unit segment.

pathlength
The number of instructions executed for a particular function.

path segment
In the NetView/PC program, the portion of a path between two resources that is listed consecutively in the service point command service (SPCS) query link configuration request list.

path statement
In NetDA/2, a route statement that is used for subarea routing. Existing VTAM and NCP path statements can be included in a network design, or new path statements can be generated.

path test
A test that enables a network operator to determine whether a path is available between two logical units (LUs) that are currently in session.

pattern-matching character
See wildcard character.

PBX See private branch exchange.

PC See path control.

PC agent
Software installed on a client PC that enables management operations to execute on the PC.

PCF See primary control field.

PCHID
See physical channel ID.

PCID See procedure correlation identifier.

PCMotion
A PC adapter that plays MPEG1-encoded digital video with stereo audio directly from the hard disk, the CD-ROM, or the network in real time.

PCNFSD
See personal-computer NFS daemon.

PCR See peak cell rate.

PDF See parallel data field.

PDN See public data network.

PDS See partitioned data set.

PDU See protocol data unit.

peak cell rate (PCR)
The maximum rate at which an asynchronous transfer mode (ATM) endsystem can transmit cells into the network over the user-to-network interface (UNI). See also maximum burst size, sustainable cell rate.

peer In network architecture, any functional unit that is in the same layer as another functional unit.

peer network
A network in which every resource is self-contained and controls its own resources.

peer services
In the IBM Realtime Interface Co-Processor device-driver application programming interface (API), the bus master services that are available through the IBM Realtime Interface Co-Processor Portmaster Adapter/A. These services transfer device-driver functions, such as the PeerClose function, between application programs running on the base operating system and application programs running on the IBM Realtime Interface Co-Processor adapter.

pel See picture element.

pending active session
In VTAM, the state of an LU-LU session recorded by the system services control point (SSCP) when it finds both logical units (LUs) available and has sent a CINIT request to the primary logical unit (PLU) of the requested session. See also active.

PEP See partitioned emulation programming.

PEP extension
See partitioned emulation programming extension.

performance and accounting management
The process of quantifying, measuring, reporting, and controlling the responsiveness, availability, utilization, and costs of an information system.

performance class
A description of an objective or commitment of performance. It consists of a performance class name, boundary definitions, response time definition, response time ranges, and response time percentage objectives. Sessions can be assigned performance classes.

performance error
See temporary error.

performance monitor interface (PMI)
In VTAM, an interface that enables the collection of information about VTAM's performance and resource utilization, which, in turn, allows for an early diagnosis of problems and more efficient tuning and debugging of VTAM.

peripheral border node
A border node that interconnects adjacent APPN networks having different network identifiers in order to support LU-LU sessions that have one partner LU in its native network. See also extended border node.

peripheral device
The equipment that can communicate directly with a particular processing unit.

peripheral host node
A node that provides an application programming interface (API) for running application programs but does not provide SSCP functions and is

not aware of the network configuration. The peripheral host node does not provide subarea node services. It has boundary function provided by its adjacent subarea.

peripheral link
In SNA, a link that connects a peripheral node to a subarea link. See also route extension.

peripheral node
In SNA, a location that uses local addresses for routing and, therefore, is not affected by changes in network addresses. A peripheral node requires boundary function assistance from an adjacent subarea node.

peripheral path control
The function in a peripheral node that routes message units between units with local addresses and provides the paths between them.

peripheral subnetwork boundary
A connection over a subnetwork boundary that is between a border and a network node with no border node function.

permanent error
An error that cannot be eliminated by retrying an operation.

permanent virtual channel (PVC)
In asynchronous transfer mode (ATM), a predefined connection between two users that is similar to a leased line. Call setup and disconnection are unnecessary for a PVC. See also switched virtual channel.

permanent virtual circuit (PVC)
A virtual circuit that has a logical channel permanently assigned to it at each data terminal equipment (DTE). A call establishment protocol is not required. The permanent virtual circuit establishes the identity of the called party within the network services contract.

permit packet
A packet that is used to transmit permits over a virtual circuit at the interface between a data terminal equipment (DTE) and a data circuit-terminating equipment (DCE).

persistent LU-LU session
See persistent session.

persistent session
An LU-LU session that z/OS Communications Server retains after the failure of a z/OS Communications Server application program. Following the application program's recovery, the application program restores or terminates the session. See also multinode persistent session.

persistent verification (PV)
A VTAM security option for conversation-level security between two logical units (LUs) that provides a way of reducing the number of password transmissions by eliminating the need to provide a user ID and password on each attach (allocate) during multiple conversations between a user and a partner LU. The user is verified during the sign-on process and remains verified until the user has been signed off the partner LU.

personal-computer NFS daemon (PCNFSD)
A daemon that manages user authentication and print spooling.

Personal System Communications Adapter (PSCA)
An adapter card that connects a microchannel-based personal computer (or processor) to a System/370 or System/390 parallel channel.

PGF See presentation graphics feature.

phase alternation line (PAL)
The television broadcast standard for European video outside of France and the countries of the former Soviet Union. See also National Television Standard Committee, NTSC format.

physical channel ID (PCHID)
A number assigned by a machine to a physical channel location.

physical circuit
A circuit established without multiplexing. See also data circuit.

physical connection
1. See connection.
2. A connection that establishes an electrical circuit.

physical layer
The OSI layer that provides the mechanical, electrical, functional, and procedural means to start, maintain, and deactivate physical connections for transmissions between data-link entities.

physical level
In X.25, a standard that defines the electrical, physical, functional, and procedural methods used to control the physical connection between the data terminal equipment (DTE) and the data circuit-terminating equipment (DCE). See also data link level, packet level.

physical line
In NCP, the physical connection between NCP and an adjacent device or local area network (LAN). A single physical line, such as token-ring or frame-relay, can support multiple logical lines. See also logical line.

physical services header (PSH)
An X.25 protocol used by IBM Systems Network Architecture (SNA) data terminal equipment (DTE). Physical services header provides address services for physically connected systems or devices. The System i family does not support PSH. See also Qualified Logical Link Control.

physical unit (PU)
1. In SNA, one of three types of network addressable units (NAUs). A PU exists in each node of an SNA network to manage and monitor, at the request of a system services control point logical unit (SSCP-LU) session, the resources (such as attached links and adjacent link stations) of a node. See also control point.
2. The component that manages and monitors the resources (such as attached links and adjacent link stations) associated with a node, as requested by an SSCP via an SSCP-PU session. An SSCP activates a session with the physical unit in order to indirectly manage, through the PU, resources of the node such as attached links. This term applies to type 2.0, type 4, and type 5 nodes only.

physical unit service
In SNA, the components within a physical unit that provide configuration services and maintenance services for SSCP-PU sessions.

physical unit type (PU type)
In SNA, the classification of a physical unit according to the type of node in which it resides. The physical unit type is the same as its node type; that is, a type 1 physical unit resides in a type 1 node, and so on.

picture element (pel, pixel)
1. An element of a raster pattern about which a toned area on a photoconductor can appear.
2. The smallest printable or displayable unit that can be displayed. A common measurement of device resolution is picture elements per inch.

PID See process identification number.

piggybacking
When data is sent between two NCPs or between an NCP and a link-attached station, the process of combining a PIU and an acknowledgment for a PIU that was previously sent.

ping The command that sends an Internet Control Message Protocol (ICMP) echo-request packet to a gateway, router, or host with the expectation of receiving a reply.

ping command
A command that sends an Internet Control Message Protocol (ICMP) echo-request packet to a gateway, router, or host with the expectation of receiving a reply.

PIP See program initialization parameter.

pipe To direct the data so that the output from one process becomes the input to another process. The standard output of one command can be connected to the standard input of another with the pipe operator. Two commands connected in this way constitute a pipeline.

pipeline
1. To start execution of an instruction sequence before the previous instruction sequence is completed to increase processing speed.
2. To perform processes in series.
3. A serial arrangement of processors or a serial arrangement of registers within a processor. Each processor or register performs part of a task and passes results to the next processor; several parts of different tasks can be performed at the same time.
4. A message processing procedure that consists of one or more programs known as stages.

piping
A feature that allows the output of a program as it is displayed on the screen to be used as input to another program without reentering the data on the keyboard.

pit In optical recording, a microscopic hole that is in the information layer of a videodisc surface made by the recording laser beam. Recorded information is contained in the pits.

PIU See path information unit.

pixel See picture element.

pixel map (pixmap)
A three-dimensional array of bits. A pixel map can be thought of as a

two-dimensional array of pixels, with each pixel being a value from zero to 2 to the power N -1, where N is the depth of the pixel map.

pixmap
See pixel map.

plain text
In cryptography, any message that is not encrypted.

plex A Printing Systems Manager (PSM) attribute that is used for defining the capability of a printer to support different placements of output images on a medium. For example, the plex attribute could specify whether the printer is to support simplex or tumble mode.

PLU See primary logical unit.

PMI See performance monitor interface.

PMM See protocol-specific MPTN manager.

PMX See programmable operator message exchange.

POI See program operator interface.

pointer
A data element or variable that holds the address of a data object or a function.

point of presence
A system that has been identified as a contact point for another subnetwork for the purposes of collecting topology information.

point-of-sale (POS)
In retail communications and Point-of-Sale Utility, pertaining to a method of providing information to support sales and of collecting the resulting sales information from retail devices located in stores.

point-to-multipoint network
A network in which there are many hosts directly attached within the scope of a single network ID.

point-to-point
Pertaining to data transmission between two locations without the use of any intermediate display station or computer.

point-to-point connection
A network configuration in which a connection or transmission channel is established between two, and only two, circuits.

point-to-point line
A communications line that connects a single remote station to a computer. See also multipoint line.

point-to-point network

1. A network arrangement made up of point-to-point links.
2. An arrangement where two devices share the same transmission line at the same time. See also multipoint line, multipoint network.

Point-to-Point Protocol (PPP)
A data-link protocol for communication between two computers that use a serial interface, typically a personal computer connected by telephone line to a server.

point-to-point wiring
A method of wiring a network by which wires are run between terminals or components of the network using the shortest route.

poison reverse
A technique for minimizing the time to achieve network convergence. After a connection disappears, the router advertising the connection retains the routing table entry for several update periods and specifies an infinite cost in its broadcasts.

policy
1. A set of considerations that influence the behavior of a managed resource or a user.
2. In the Backup, Recovery, and Media Services licensed program, a named or otherwise identifiable set of controls used by Backup, Recovery, and Media Services to manage and control specific operations. A policy is an overriding value that is carried in tables for use as a default in processing backup, recovery, archive, and media management operations.

policy region
A group of managed resources that share one or more common policies and which model the management or organizational structure of a network computing environment. Administrators use policy regions to group similar resources, to define access to the resources, to control the resources, and to associate rules for governing the resources.

policy subregion
In a Tivoli environment, a policy region created or residing in another policy region. When a policy subregion is created, it initially uses the resource and policy properties of the parent policy region. The Tivoli administrator can later change or customize these properties to reflect the specific needs and differences of the subregion.

polling
1. Interrogation of devices for such purposes as avoiding contention, determining operational status, or determining readiness to send or receive data.
2. The process whereby stations are invited, one at a time, to transmit.

pop To remove an item from the top of a pushdown list. See also push.

POP See Post Office Protocol.

POR See power-on reset.

port
1. An access point for data entry or exit.
2. A hardware interface to which an I/O device is attached for the purpose of sending and receiving data.
3. An abstraction that is used by transport protocols to distinguish among multiple destinations within a host machine.

Portable Operating System Interface (POSIX)
An IEEE family of standards designed to provide portability between operating systems that are based on UNIX. POSIX describes a wide spectrum of operating-system components ranging from C language and shell interfaces to system administration.

portmapper
A program that maps client programs to the port numbers of server programs. A portmapper is used with remote procedure call (RPC) programs.

port number
1. The part of a socket address that identifies a port within a host.
2. In Internet communications, the identifier for a logical connector between an application entity and the transport service.

POS See point-of-sale.

positional operand
An operand in a language statement that has a fixed position. See also definition statement, keyword, keyword operand.

positive response
In SNA, a reply indicating that a request arrived and was successfully received and processed. See also negative response, response header.

POSIX
See Portable Operating System Interface.

POST See power-on self-test.

post
1. To add information in a record to keep that record current.
2. To note the occurrence of an event.
3. In the AIX operating system, the action required to make a pop-up or pull-down menu appear. This action is normally a click or a button press on one of the mouse buttons.

postmaster
In Tivoli NetView, a daemon that directs network management information between multiple application programs and agents that are running concurrently. The postmaster determines the route by using specified addresses or a routing table that is configured in the object registration service.

Post Office Protocol (POP)
A protocol that is used for exchanging network mail and accessing mailboxes.

PostScript
A page description language developed by Adobe Systems, Incorporated, that describes how text and graphics are presented on printers and display devices.

Post Telephone and Telegraph Administration (PTT)
An organization, usually a government department, that provides data communication services in countries or regions other than the USA. Examples of PTTs are the Bundespost in Germany and the Nippon Telephone and Telegraph Public Corporation in Japan.

power-on reset (POR)
A key sequence that restarts the operating system (or other program) without turning off the electrical power of the system.

power-on self-test (POST)
A series of internal diagnostic tests activated each time the system power is turned on.

PPI See program-to-program interface.

PPO See primary program operator application program.

PPP See Point-to-Point Protocol.

PPT See primary POI task.

predefined database
In the AIX operating system, a database that contains configuration data for all possible devices supported by the system.

prenegotiation phase
An optional phase of link activation that occurs after physical connection of the link has been established. During this phase, polling might occur to determine whether the adjacent link station is active. During this phase, prenegotiation XID3s are also exchanged to allow each node to verify the identity of the adjacent node. See also connect phase, contact phase.

presentation graphics feature (PGF)
In the Tivoli NetView Performance Monitor, a feature used with the Graphical Data Display Manager to generate online graphs in the NetView Performance Monitor graphic subsystem.

presentation layer
In OSI architecture, the layer that provides services that enable functional units in the application layer to select a common syntax in order to define data and operations to be performed on the data.

presentation services command processor (PSCP)
A facility that processes requests from a user terminal and formats displays to be presented at the user terminal.

presentation space

1. In the context of the Emulator High-Level Language Application Programming Interface (EHLLAPI), the area in computer memory that corresponds to the user's screen image.
2. The space that contains the device-independent definition of a picture.
3. A conceptual two-dimensional surface in storage on which data for a portion of the display surface is represented.

presentation space ID (PSID)
An identifier to indicate which host emulator session is to be used for an EHLLAPI function.

primary address space
The address space whose segment table is used to fetch instructions. All data that is used by a VTAM macroinstruction request must be addressable in the primary address space.

primary application program
In VTAM, an application program that acts as the primary end of an LU-LU session.

primary control field (PCF)
A field in an NCP line trace record that indicates the state of the line at a given point in time.

primary database
In high availability disaster recovery, the main database, which is accessed

by applications. Applications apply updates to the primary database, and those updates are propagated on the standby database by using log shipping.

primary end of a session
The end of a session that uses primary protocols. The primary end establishes the session. For an LU-LU session, the primary end of the session is the primary logical unit. See also half-session, secondary end of a session.

primary focal point
A focal point that is understood to be the preferred source of management services support for a particular category.

primary half-session
In SNA, the half-session that sends the session activation request. See also primary logical unit, secondary half-session.

primary logical unit (PLU)
In SNA, the logical unit that contains the primary half-session for a particular logical unit-to-logical unit (LU-to-LU) session. See also primary half-session, secondary logical unit.

primary path
1. In CCP, one of two paths defined for information flow to and from the physical units attached to the network by means of an IBM 3710 Network Controller. The primary path is the path that is normally used.
2. The channel that an operation first uses. See also alternate path.

primary POI task (PPT)
In Tivoli NetView for OS/390, the subtask that processes all unsolicited messages that are received from the VTAM program operator interface (POI) and delivers them to the controlling operator or to the command processor. The PPT also processes (a) the initial command that is specified to execute when Tivoli NetView for OS/390 is initialized and (b) timer request commands that are scheduled to execute under the PPT.

primary program operator application program (PPO)
A program operator application program that is authorized to receive unsolicited messages. When the PPO is active, all unsolicited messages go to the PPO. Conversely, when the PPO is inactive, unsolicited messages go to the system console. There can be only one PPO in any domain. See also secondary program operator application program.

primary route
In NCP frame relay, the internal PVC segment that is between the two primary frame handler subports in a subport set.

primary session
An extended recovery facility (XRF) session between the active application subsystem and a terminal user.

primary station
1. In high-level data link control (HDLC), the part of a data station that supports the primary control functions of the data link, generates commands for transmission, and interprets received responses.
2. In SNA, the station on an SDLC data link that is responsible for the control of the data link. There must be only one primary station on a data link. All traffic over the data link is between the primary station and a secondary station. Specific responsibilities assigned to the

primary station include initialization of control signal interchange, organization of data flow, and actions to perform error control and error recovery functions.

primary window
The window in which the main interaction between the user and an object takes place.

primitive
See operation.

principal name
In the Kerberos protocol, the name by which the Kerberos principal is identified. The principal name usually consists of either a) a user name and a realm name or b) a service name, host name, and a realm name. See also Kerberos principal.

principal password
In Kerberos, the password that corresponds to the principal name. This password is used to authenticate services and users to each other.

print file document
A Printing Systems Manager (PSM) object that represents text or data to be printed by a job. See also print resource document.

Printing Systems Manager (PSM)
An IBM licensed program that applies print administration and management technology to a cross-platform, client/server print system. PSM provides a set of (a) printing functions for submitting and controlling print jobs and (b) systems management and operator functions to control print spoolers and print supervisors. PSM is based on the Palladium distributed print system.

print resource document
A Printing Systems Manager (PSM) object that represents a resource, such as a graphic or font, that is used by a job to print a print file document. See also print file document.

Print Services Facility (PSF)
An IBM licensed program that manages and controls the input data stream and output data stream required by supported IBM page printers.

private branch exchange (PBX)
A switching system located on a customer's premises that consolidates the number of inside lines (extensions) into a smaller number of outside lines (trunks). Many PBXs also provide advanced voice and data communications features.

private MIB
In the Simple Network Management Protocol (SNMP), a MIB module that is located under the private branch of the Structure of Management Information (SMI) and that is specified exclusively by a specific enterprise (a corporation or university, for example).

private network
A network established and operated by a private organization or corporation for users within that organization or corporation. See also public network, public network.

private partition
In VSE, a partition allocated for the execution of a specific program or

application program. Storage in a private partition is not addressable by programs running in other virtual address spaces.

privilege attribute certificate (PAC)
A digital document that contains a principal's authentication and authorization attributes and a principal's capabilities.

PRM See protected-resource manager.

probe Program code that collects troubleshooting information in the event of an error condition. This information is sent to First Failure Support Technology (FFST) or otherwise used in problem solving.

probe ID
A 4-byte hexadecimal value that identifies a probe. The unique probe ID is used to localize a problem.

problem determination
The process of determining the source of a problem. Sources of a problem can include a program component, machine failure, telecommunication facilities, user or contractor-installed programs or equipment, or environmental failure such as a power loss, or user error.

problem management focal point
The management services responsible for the problem analysis and diagnosis for a sphere of control. An alert focal point is a subset of a problem management focal point.

procedure
In a programming language, a block, with or without formal parameters, that is initiated by means of a procedure call.

procedure call
In programming languages, a language construct for invoking execution of a procedure.

procedure correlation identifier (PCID)
An identifier generated by an SNA control point (CP) to (a) correlate search, activation, and deactivation requests and responses related to a specific session between logical units (LUs), and (b) identify this session for such purposes as problem determination, accounting, and performance monitoring. The PCID and the network-qualified name of the CP generating the PCID constitute the fully qualified procedure correlation identifier (FQPCID), which is unique across the network in which it is used.

procedure group
A set of programs that are called or linked together.

process
1. A progressively continuing procedure consisting of a series of controlled activities that are systematically directed toward a particular result or end.
2. An instance of a program running on a system and the resources that it uses.

process anchor block (PAB)
In VTAM, a process scheduling services dispatch point.

process ID
See process identification number.

process identification number (PID, process ID)
A unique number assigned to a process by the operating system. The number is used internally by processes to communicate.

processing unit
See processor.

processor
In a computer, the part that interprets and executes instructions. Two typical components of a processor are a control unit and an arithmetic logic unit.

production system
A system on which application programs that are already developed and tested run on a regular basis.

product-set identification (PSID)
In SNA, a technique for identifying the hardware and software products that implement a network component.

Professional Office Systems (PROFS)
See OfficeVision Series.

profile
1. Data that describes the characteristics of a user, group, resource, program, device, or remote location. See also user profile.
2. A container for application-specific information about a particular type of resource. A Tivoli application specifies the template for its profiles, which includes information about the resources that the Tivoli application can manage.

PROFILE EXEC
In VM, a special EXEC procedure with a filename of PROFILE. The procedure is normally executed immediately after CMS is loaded into a virtual machine. It contains CP and CMS commands that are to be issued at the start of every terminal session.

profile manager
In a Tivoli environment, a container for profiles that links the profiles to a set of resources, called subscribers. Tivoli administrators use profile managers to organize and distribute profiles. A profile manager can operate in the dataless mode or database mode.

PROFS
See Professional Office Systems.

program initialization parameter (PIP)
The initial parameter value or values passed to a target program as input or used to set up the process environment.

programmable operator facility (PROP)
A VM facility that allows remote control of a virtual machine by intercepting messages directed for that machine and taking preprogrammed action.

programmable operator message exchange (PMX)
The interface that gives the NetView operator the ability to communicate with the programmable operator facility.

programmable workstation
A workstation that has some degree of processing capability and allows the user to change its functions.

programming request for price quotation (programming RPQ, PRPQ)
A customer request for a price quotation on alterations or additions to the functional capabilities of system control programming or licensed programs. The PRPQ may be used in conjunction with computing system RPQs to solve unique data processing problems.

programming RPQ
See programming request for price quotation.

program operator
An application program that is authorized to issue operator commands and receive operator awareness messages. See also solicited message, unsolicited message.

program operator interface (POI)
A VTAM function that allows programs to perform VTAM operator functions.

program status word (PSW)
An area in storage used to indicate the order in which instructions are executed, and to hold and indicate the status of the computer system.

program temporary fix (PTF)
For System i, System p, and System z products, a package containing individual or multiple fixes that is made available to all licensed customers. A PTF resolves defects and might provide enhancements.

program-to-program interface (PPI)
A facility that allows user programs to send data buffers to or receive data buffers from other user programs.

program update tape (PUT)
A code release to Transaction Processing Facility customers containing maintenance (program fixes) and new function. See also Transaction Processing Facility.

PROP See programmable operator facility.

protected conversation
A conversation that supports the two-phase commit process for the synchronization of changes.

protected resource
A resource that is updated in a synchronized manner during resource recovery processing.

protected-resource manager (PRM)
See protection manager.

protection key
An indicator that appears in the current program status word whenever an associated task has control of the system. This indicator must match the storage keys of all main storage blocks that the task is to use.

protection manager
A system component, associated with one or more protected resources, that interacts with sync point services to carry out two-phase commit protocols. A protection manager implements the parts of the protocol that are specific to a particular resource type. Two types of protection managers are defined: conversational resource protection managers and local (nonconversational) resource protection managers. Together, these resource protection managers are referred to as protected-resource managers.

protocol

1. A set of rules controlling the communication and transfer of data between two or more devices or systems in a communication network. See also bracket protocol, link protocol.
2. In OSI, a specification of the format and relative timing of information exchanged between peer entities within a layer.

protocol boundary
The signals and rules governing interactions between two components within a node.

protocol converter non-SNA equipment
A protocol converter that does not provide logical link control. The user provides any protocols above the X.25 packet level.

protocol data unit (PDU)
A unit of data that is specified in a protocol of a given layer, and that consists of protocol control information of this layer, and possibly user data of this layer.

protocol handler
A service that receives and sends messages in specific communication protocols, such as HTTP and HTTPs. The protocol handler calls data handlers to extract the data that is contained in the messages.

protocol-specific MPTN manager (PMM)
A component of the MPTN architecture that performs management, routing, and binding functions that are performed differently for the different transport providers.

protocol stack
A set of network protocol layers and software that work together to process protocol.

protocol suite
A set of protocols that cooperate to handle the transmission tasks for a communication system.

prototype profile
In a Tivoli environment, a model profile from which a Tivoli administrator can create other like profiles, often by cloning the existing profile.

proxy agent
A process or entity that is both an agent to its manager and a manager for one or more objects. It satisfies requests from its manager by relaying those requests and translating them for the objects that it manages.

proxy server
A server that receives requests intended for another server and that acts on behalf of the client (as the client's proxy) to obtain the requested service. A proxy server is often used when the client and the server are incompatible for direct connection. For example, the client is unable to meet the security authentication requirements of the server but should be permitted some services.

PRPQ See programming request for price quotation.

PSCA See Personal System Communications Adapter.

PSCP See presentation services command processor.

PSDN See packet switching data network.

PSF See Print Services Facility.

PSH See physical services header.

PSID

1. See presentation space ID.
2. See product-set identification.

PSM See Printing Systems Manager.

PSTN See public switched telephone network.

PSW See program status word.

PTF See program temporary fix.

PTT See Post Telephone and Telegraph Administration.

PU See physical unit.

public data network (PDN)
A communications common carrier network that provides data communications services over switched or nonswitched lines.

public network
See public data network.

public switched telephone network (PSTN)
A communications common carrier network that provides voice and data communications services over switched lines.

pull A network operation that initiates an action by requesting the action from a resource. See also push.

pull-down menu
See menu.

PU-PU flow
In SNA, the exchange between physical units (PUs) of network control requests and responses.

push

1. To add an item to the top of a pushdown list. See also pop.
2. A network operation that sends information to resources. See also pull.

push button
In a window or dialog box, a rectangular control that, when clicked, immediately causes an action to be performed. Push buttons can be labeled with text, graphics, or both. The most familiar push buttons are OK and Cancel.

pushdown list
A list that is constructed and maintained so that the next data element to be retrieved is the most recently stored. See also last-in first-out.

PUT See program update tape.

PU type
See physical unit type.

PV See persistent verification.

PVC

1. See permanent virtual circuit.
2. See permanent virtual channel.

PVC segment
In NCP, the connection between two frame-relay subports in the same NCP or in adjacent NCPs. A PVC segment between adjacent NCPs may pass through a frame-relay network.

Q

qdaemon
A process that maintains a list of outstanding jobs and sends them to the specified device at the appropriate time.

QDIO See queued direct I/O.

QLLC See Qualified Logical Link Control.

QoS See quality of service.

QSAM
See queued sequential access method.

Qualified Logical Link Control (QLLC)
An X.25 protocol that allows the transfer of data link control information between two adjoining SNA nodes that are connected through an X.25 packet-switching data network. The QLLC provides the qualifier Q bit in X.25 data packets to identify packets that carry logical link protocol information. See also physical services header.

quality of service (QoS)
For an asynchronous transfer mode (ATM) virtual channel or a Networking BroadBand Services (NBBS) network connection, a set of communication characteristics such as end-to-end delay, jitter, and packet loss ratio.

query A statement, or combination of statements, that is used to search a rule project (or other scope) and to select rule project elements that meet certain criteria.

queue

1. A line or list of items waiting to be processed, for example, work to be performed or messages to be displayed or transmitted.
2. A data structure for processing work in which the first element added to the queue is the first element processed. This order is referred to as first-in first-out (FIFO).
3. An object that holds messages for message-queueing applications. A queue is owned and maintained by a queue manager.
4. To form or arrange as a list or line.

queued BIND
In VTAM, a BIND request that is sent from the primary logical unit (PLU) to the secondary logical unit (SLU), to which the SLU has not yet responded.

queued CINIT
In VTAM, a CINIT request that is sent from a system services control point (SSCP) to a logical unit (LU), to which the LU has not yet responded.

queued direct I/O (QDIO)
A hardware channel architecture for direct data exchange with I/O devices, where both the I/O device and the program running on the server reference main storage directly through a set of data queues. The QDIO

architecture is used by Open Systems Adapter-Express (OSA-Express), HiperSockets, and Fiber Channel Protocol (FCP) channels.

queued sequential access method (QSAM)
An access method for storing and retrieving logical records in a continuous sequence. Input data blocks awaiting processing or output data blocks awaiting transfer to auxiliary storage are queued on the system to minimize delays in I/O operations.

queued session
In VTAM, a requested LU-LU session that cannot be started because one of the logical units (LUs) is not available. If the session-initiation request specifies queuing, the system services control points (SSCPs) record the request and later continue with the session-establishment procedure when both LUs become available.

quick closedown
In VTAM, a closedown in which any RPL-based communication macroinstruction is terminated (posted complete with an error code), no new sessions can be established, and no new access method control blocks (ACBs) can be opened. See also cancel closedown, orderly closedown.

quiesce
To end a process or shut down a system after allowing normal completion of active operations.

quiesce protocol
In VTAM, a method of communicating in one direction at a time. Either the primary logical unit (PLU) or the secondary logical unit (SLU) assumes the exclusive right to send normal-flow requests, and the other node does not send such requests. When the sender wants to receive, it releases the other node from its quiesced state.

R

RACF See Resource Access Control Facility.

radio button
In graphical user interfaces, a control that comprises a circle with text beside it, representing one of set of mutually exclusive choices. The circle is partially filled when a choice is selected.

radix The positive integer by which the weight of the digit place is multiplied to obtain the weight of the digit place with the next higher weight; for example, in the decimal numeration system the radix of each digit place is 10, in a biquinary code the radix of each fives position is 2.

RAM See random access memory.

random access memory (RAM)
Computer memory in which any storage location can be accessed directly. See also direct access storage, direct access storage device.

Rapid Transport Protocol (RTP)
A connection-oriented, full-duplex transport protocol for carrying session traffic over High-Performance Routing (HPR) routes. See also automatic network routing, Rapid Transport Protocol connection.

Rapid Transport Protocol connection (RTP connection)
A connection between two High-Performance Routing (HPR) nodes that may traverse one or more intermediate HPR nodes and links. The

connection endpoints provide error recovery and adaptive rate-based flow control for the connection traffic, and nondisruptive switching of the underlying physical path in the case of route outage. The intermediate HPR nodes minimize their routing overhead using automatic network routing (ANR) protocols, which rely on header information to permit efficient source routing and prioritized transmission along the RTP connection. See also Rapid Transport Protocol.

RAR See route addition resistance.

RARP See Reverse Address Resolution Protocol.

RAS See reliability, availability, and serviceability.

rated throughput
For data links, the rate at which all of the offered frames are forwarded by the device.

RC See return code.

RDN See relative distinguished name.

RDT See resource definition table.

reachability
Pertaining to the ability of a node or a resource to communicate with another node or resource.

readme file
A file that contains the information that users need to know before they install and use a fix or maintenance release of a product.

read-only access mode
An access mode associated with a virtual disk that allows a user to read, but not write or update, any file on the disk.

read-only memory (ROM)
Memory in which stored data cannot be changed by the user except under special conditions.

read/write access mode
In VM, an access mode that is associated with a virtual disk that allows a user to read and write any file on the disk.

real address
The address by which a logical unit (LU) is known within the SNA network in which it resides. See also network address translation.

real name
The name by which a resource is identified in its native network.

real object
An object that represents an actual resource. See also aggregate object.

real resource

1. In VTAM, a resource identified by its real name and its real network identifier.
2. In the NetView Graphic Monitor Facility, an individual network resource represented by a real object.

real time
The processing of information that returns a result so rapidly that the interaction appears to be instantaneous.

reassembly
In communications, the process of putting segmented packets back together after they have been received.

receive not ready (RNR)
In communications, a data link command or response that indicates a temporary condition of being unable to accept incoming frames.

receive pacing
In SNA, the pacing of message units that a component is receiving. See also send pacing.

reception congestion
A network congestion condition occurring at a data switching exchange (DSE).

RECFMS
See record formatted maintenance statistics.

RECMS
See record maintenance statistics.

recognized private operating agency (RPOA)
Any individual, company, or corporation, other than a government department or service, that operates a telecommunication service and is subject to the obligations undertaken in the Convention of the International Telecommunication Union and in the Regulations; for example, a communication common carrier.

record

1. In programming languages, an aggregate that consists of data objects, possibly with different attributes, that usually have identifiers attached to them. In some programming languages, records are called structures.
2. In VTAM, the unit of data transmission for record mode. A record represents whatever amount of data the transmitting node chooses to send.
3. A group of related data, words, or fields treated as a unit, such as one name, address, and telephone number.
4. A set of one or more related data items grouped for processing.

record data format
A format that maintains record boundaries for data that is being transmitted.

record formatted maintenance statistics (RECFMS)
A statistical record built by an SNA controller and usually solicited by the host.

recording filter
In Tivoli NetView for OS/390, the function that determines which events, statistics, and alerts are stored in a database. See also filter.

record maintenance statistics (RECMS)
An SNA error event record that is built from an NCP or line error and sent unsolicited to the host.

recursion
A programming technique in which a program or routine calls itself to perform successive steps in an operation, with each step using the output of the preceding step.

redefinable line
A line that is in use and can be activated. It can be changed to a spare line using NTuneMON with NTuneNCP.

redirect
To define or use a logical device name as a reference to another device or file that may be local or remote.

reduced instruction-set computer (RISC)
A computer that uses a small, simplified set of frequently used instructions for rapid processing.

redundancy
The use of several identical functional units, such as several disk drives or power supply systems, within one computer system in order to provide data security and a certain degree of fault tolerance in case of hardware failures.

reentrant
The attribute of a program or routine that allows the same copy of the program or routine to be used concurrently by two or more tasks.

reference implementation
An implementation by which other implementations are judged for conformance to a standard or are tested for interoperability.

reference model
In the context of Tivoli software, the model configuration for a system, or set of systems, that is used to maintain consistent configurations in a distributed environment.

referred Locate search
See referred search.

referred search
A directed search sent from a network node to a central directory server.

register
An internal computer component capable of storing a specified amount of data and accepting or transferring this data rapidly.

registered network ID
An 8-byte name included in an IBM-maintained worldwide registry that has a structured format and is assigned to a particular IBM customer to uniquely identify a specific network.

registrable resource
A logical unit that can be registered with a network node server, a central directory server, or both a network node server and a central directory server.

registration file

regular command
A command processed by a regular command processor. Regular commands can run concurrently with other regular commands and can be interrupted by immediate commands. Most commands and all command lists are regular commands. See also immediate command.

relation
An unordered flat collection class that uses keys, allows for duplicate elements, and has element equality.

relative distinguished name (RDN)
The part of an object name that is an attribute of the object itself.

release
1. In VTAM, to relinquish control of resources (communication controllers or physical units). See also acquire.
2. A distribution of a new product or new function and authorized program analysis report (APAR) fixes for an existing product. The first version of a product is announced as release 1 modification level 0. See also resource takeover.

reliability
A measurement of the ability of a system to continue processing without failure. Shutting down an on-line system to process batch updates to the database reduces its availability to end users but has no bearing on the reliability of components required to deliver the online service.

reliability, availability, and serviceability (RAS)
A combination of design methodologies, system policies, and intrinsic capabilities that, taken together, balance improved hardware availability with the costs required to achieve it. Reliability is the degree to which the hardware remains free of faults. Availability is the ability of the system to continue operating despite predicted or experienced faults. Serviceability is how efficiently and nondisruptively broken hardware can be fixed.

remote
Pertaining to a system, program, or device that is accessed through a communication line. See also link-attached.

remote association
In VTAM CMIP services, the association between application entities in different nodes. See also association.

remote bridging
The function of a bridge that allows two bridges to connect multiple LANs using a telecommunication link. See also local bridging.

remote console function
In the NetView/PC program, the function that allows one PC to control another PC.

remote distribution
In a Tivoli environment, a distribution to target machines in a connected Tivoli Management Region.

Remote Execution Protocol (REXEC)
A protocol that allows the execution of a command or program on any host in the network. The local host receives the results of the command execution.

remote host
Any host on a network except the host at which a particular operator is working.

remote IPL (RIPL)
The initial program load of a remote requester by a server on which the appropriate program code is located.

remote modem self-test
A check on hardware to identify a field-replaceable unit that is failing.

remote PC
In the NetView/PC program, the PC that runs the local PC, which has had its keyboard locked by means of the remote control function. See also local PC.

Remote Procedure Call (RPC)
A protocol that allows a program on a client computer to run a program on a server.

Remote Spooling Communications Subsystem (RSCS)
An IBM licensed program that transfers spool files, commands, and messages between VM users, remote stations, and remote and local batch systems through HASP-compatible telecommunication facilities.

repeater
A device that regenerates signals in order to extend the range of transmission between data stations or to interconnect two branches.

repeater range
The Tivoli clients that receive data from a repeater site.

repeater site
In a TME 10 Management Region (TMR), a managed node that is configured with the MDist feature. A repeater site receives a single copy of data and distributes it to the next tier of clients.

replacement code point
In alerts, a 2-byte code point in which the first byte indexes text providing a high-level description of a condition, and the second byte indexes text providing a more specific description. The second byte is nonzero.

replicated application program
In VTAM, an application program that is built from a model application program definition.

REQMS
See request for maintenance statistics.

request commit
The vote that is submitted to the prepare phase if the participant has modified data and is prepared to commit or roll back.

requester
See client.

Request for Comments (RFC)
In Internet communication, one of a series of numbered documents that describe Internet communication protocols.

request for maintenance statistics (REQMS)
A host solicitation to an SNA controller for a statistical data record.

request for price quotation (RPQ)
A customer request for a price quotation on alterations or additions to the functional capabilities of a hardware product for a computing system or a device. See also programming request for price quotation.

request header (RH)
In SNA, the control information that precedes a request unit. See also request/response header.

request parameter list (RPL)
In VTAM, a control block that contains the parameters necessary for processing a request for data transfer, for establishing or terminating a session, or for some other operation.

request/response header (RH)
In SNA networking, control information preceding a request/response unit (RU), specifying the type of RU (request unit or response unit) and containing control information associated with that RU. See also request header, request/response unit.

request/response unit (RU)
A generic term for a request unit or a response unit. See also request/response header.

request to send (RTS)
In data communication, a signal raised by data terminal equipment (DTE), while the data terminal is ready, to request facilities from data circuit-terminating equipment (DCE) so that data can be sent. See also clear to send.

request unit (RU)
In SNA, a message unit that contains data, control information, or both (for example, data and indicators).

required cryptographic session
A cryptographic session in which all outbound data is enciphered and all inbound data is deciphered. See also cryptographic session, selective cryptographic session.

reset

1. To put all or part of a data processing device back into a prescribed state.
2. To cause a counter to take the state corresponding to a specified initial number.
3. In X.25 communications, to reinitialize the flow of control on a virtual circuit, which eliminates all data that may be in transit for the virtual circuit at the time of resetting.

reset confirmation packet
In X.25 communications, a packet transmitted by the data terminal equipment (DTE) to inform the data circuit-terminating equipment (DCE) that a reset operation has been processed.

reset indication packet
In X.25 communications, a packet transmitted by the data circuit-terminating equipment (DCE) to inform the data terminal equipment (DTE) that a virtual call or a permanent virtual circuit is being reset and the reason for the resetting.

reset request packet
In X.25 communications, a packet used for the resetting of a virtual circuit at the DTE/DCE interface.

resident
Pertaining to a computer program or data that stays in the memory of the computer while other programs are running.

resolver
In TCP/IP, a program or subroutine that obtains information from a domain name server or a local table for use by an application program.

resource

1. A hardware, software, or data entity.
2. A facility of a computing system or operating system required by a job, task, or running program. Resources include main storage, input/output devices, the processing unit, data sets, files, libraries, folders, application servers, and control or processing programs.

Resource Access Control Facility (RACF)
An IBM licensed program that provides access control by identifying users to the system; verifying users of the system; authorizing access to protected resources; logging unauthorized attempts to enter the system; and logging accesses to protected resources. See also command authorization.

resource definition table (RDT)
In VTAM, a table that describes the characteristics of each node available to VTAM and associates each node with a network address. This is the main VTAM network configuration table.

resource hierarchy
In VTAM, the relationship among network resources in which some resources are subordinate to others as a result of their position in the network structure and architecture. For example, the logical units (LUs) of a peripheral physical unit (PU) are subordinate to that PU, which, in turn, is subordinate to the link attaching it to its subarea node.

resource label
In the NetView Graphic Monitor Facility, the textual information that identifies a particular aggregate or real resource. The resource label is displayed next to the resource symbol, and it cannot be changed by the network operator.

resource level
The hierarchical position of a device (and the software that is contained within it) in a data processing system. For example, a first-level resource could be the communication controller, and the second-level resource could be the line connected to it.

Resource Management Facility (RMF)
Software that measures and reports on the performance and availability of a system.

resource manager (RM)
A subsystem or component that manages resources that can be involved in transactions. Resource managers can be categorized as work managers, data resource managers, and communication resource managers.

Resource Measurement Facility (RMF)
A feature of z/OS that measures selected areas of system activity and presents the data collected in the format of printed reports, System Management Facility (SMF) records, or display reports.

Resource Object Data Manager (RODM)
In Tivoli NetView for z/OS, a component that provides an in-memory cache for maintaining real-time data in an address space that is accessible by multiple applications.

resource record (RR)
In a Domain Name System (DNS), a location where data is stored.

resource registration
The process of identifying names of resources, such as LUs, to a network node server or a central directory server.

resource resolution table (RRT)
In Tivoli NetView Performance Monitor, a table that contains the names of the network resources for which data is to be collected. The resource resolution table corresponds with a network control program (NCP) and is built by NetView Performance Monitor Global Enterprise Manager from an NCP Stage I and an NCP resource resolution table.

resource sequence number (RSN)
A value that identifies an update of a resource in a network topology database.

resource status collector
A function of the NetView program that collects status information on monitored resources and forwards this information to the resource status manager.

resource status manager
The part of the NetView Graphic Monitor Facility that maintains a database of SNA resource status information and that forwards this information to all attached server workstations.

resource symbol
In the NetView Graphic Monitor Facility, a geometric shape that represents a particular kind of resource and that indicates whether that resource is an aggregate resource. A square, for example, represents a host.

resource takeover
In VTAM, an action initiated by a network operator to transfer control of resources from one domain to another without breaking the connections or disrupting existing LU-LU sessions on the connection. See also acquire, release.

responded output
In VTAM, a type of output request that is completed when a response is returned.

response
In data communication, a reply that is represented in the control field of a response frame. It advises the primary or combined station of the action taken by the secondary or other combined station to one or more commands. See also command.

response file
A file containing predefined values that is used instead of someone having to enter those values one at a time. See also CID methodology.

response frame
A frame that is transmitted by a secondary station or a frame that is transmitted by a combined station that contains the address of the transmitting combined station.

response header (RH)
In SNA, a header, optionally followed by a response unit, that indicates whether the response is positive or negative and that may contain a pacing response. See also negative response, pacing response, positive response, request header.

response indicator
A 1-character field passed with an input record from the system to a program to provide information about the data record or actions taken by the workstation user.

response level
The state of a monitor when a specified threshold is reached.

response time
1. In capacity planning, the elapsed time between the end of an inquiry or demand on a computer system and the beginning of the response. An example of response time is the length of time between an indication of the end of inquiry and the display of the first character of the response at a user's workstation.
2. For response time monitoring, the time from the activation of a transaction until a response is received, according to the response time definition coded in the performance class.

response time monitor (RTM)
A feature available with certain hardware devices to allow measurement of response times, which can be collected and displayed.

response unit (RU)
A message unit that acknowledges a request unit. It can contain prefix information received in a request unit.

Restructured Extended Executor (REXX)
A general-purpose, high-level programming language, particularly suitable for EXEC procedures or programs for personal computing.

return code (RC)
A value returned by a program to indicate the result of its processing. Completion codes and reason codes are examples of return codes.

Reverse Address Resolution Protocol (RARP)
In TCP/IP networking, a protocol by which a diskless machine can obtain its IP address from a RARP server. The diskless machine broadcasts a request and its physical hardware address. The RARP server responds by returning an IP address based on the physical address. See also address resolution, Address Resolution Protocol.

reverse charging
In X.25, a packet-switching data network optional facility that allows the data terminal equipment (DTE) to request that the cost of a communications session be charged to the DTE that is called.

reverse explicit route
An explicit route that terminates in the host and must use the same set of subarea nodes and transmission groups as their corresponding forward explicit route.

review file
In NPM, a VSAM key-sequenced data set (KSDS) that contains data that is collected and recorded as a result of a network start display command or start monitor command.

REX See route extension.

REXEC
See Remote Execution Protocol.

REXX See Restructured Extended Executor.

RFC See Request for Comments.

RGB Pertaining to a color display that accepts signals representing red, green, and blue.

RH

1. See request header.
2. See response header.
3. See request/response header.

ring A method used to distribute data in a LAN.

ring network

1. A network in which every node has exactly two branches connected to it and in which there are exactly two paths between any two nodes.
2. A network configuration in which devices are connected by unidirectional transmission links to form a closed path.

ring station
The functions that are necessary for connecting to the local area network and for operating with the token-ring protocols. These include token handling, transferring copied frames from the ring to the using node's storage, maintaining error counters, observing Media Access Control (MAC) sublayer protocols (for address acquisition, error reporting, or other duties), and (in the full-function native mode) directing frames to the correct Data Link Control link station. A ring station is an instance of a MAC sublayer in a node attached to a ring.

RIP See Routing Information Protocol.

RIPL See remote IPL.

RISC See reduced instruction-set computer.

RLE See run-length encoding.

RM See resource manager.

RMF

1. See Resource Measurement Facility.
2. See Resource Management Facility.

RNR See receive not ready.

RODM
See Resource Object Data Manager.

role A job function that identifies the tasks that a user can perform and the resources to which a user has access. A user can be assigned one or more roles.

ROM See read-only memory.

route The path that network traffic follows from its source to its destination.

route addition resistance (RAR)
A value that indicates the capacity of a network node to perform intermediate session routing.

route extension (REX)
In SNA, the path control network components, including a peripheral link, that make up the portion of a path between a subarea node and a network

addressable unit (NAU) in an adjacent peripheral node. See also explicit route, path, peripheral link, virtual route.

router

1. A computer that determines the path of network traffic flow. The path selection is made from several paths based on information obtained from specific protocols, algorithms that attempt to identify the shortest or best path, and other criteria such as metrics or protocol-specific destination addresses.
2. An attaching device that connects two LAN segments at the reference-model network layer. The LAN segments can use similar or different architectures. See also bridge.

Route Selection control vector (RSCV)

A control vector that describes a route within an APPN network. The RSCV consists of an ordered sequence of control vectors that identify the TGs and nodes that make up the path from an origin node to a destination node.

route selection services (RSS)

A subcomponent of the topology and routing services component that determines the preferred route between a specified pair of nodes for a given class of service.

route weight

A value computed for the set of transmission groups and intermediate nodes interconnecting an origin and destination node; route weight determines which route is preferred during the route selection process.

routine

A program or sequence of instructions called by a program. Typically, a routine has a general purpose and is frequently used.

routing

1. The list of users who are to receive an item when it is distributed, including all users named specifically and those users named on distribution lists by the sender.
2. The assignment of the path by which a message is to reach its destination.

routing domain

In Internet communications, a group of intermediate systems that use a routing protocol so that the representation of the overall network is the same within each intermediate system. Routing domains are connected to each other by exterior links.

Routing Information Protocol (RIP)

In the Internet suite of protocols, a protocol used to exchange intradomain routing information and to determine optimum routes between internet hosts. This protocol determines optimum routes on the basis of route metrics, not link transmission speed.

routing loop

A situation that occurs when two or more mail forwarding mechanisms attempt to forward mail to each other. The mail travels back and forth over the network, creating a high volume of traffic that may seriously impact other network users.

routing protocol

A set of rules that routers use to manage router information.

routing table
A collection of routes that is used to direct datagram forwarding or to establish a connection. The information is passed among routers to identify network topology and destination feasibility.

RPC See Remote Procedure Call.

RPL See request parameter list.

RPL-based macroinstruction
In VTAM, a macroinstruction whose parameters are specified by the user in a request parameter list.

RPOA See recognized private operating agency.

RPQ See request for price quotation.

RR See resource record.

RRT See resource resolution table.

RS/6000
A family of workstations and servers based on IBM POWER architecture. They are primarily designed for running multiuser numerical computing applications that use the AIX operating system.

RSCS See Remote Spooling Communications Subsystem.

RSCV See Route Selection control vector.

RSN See resource sequence number.

RSS See route selection services.

RTM See response time monitor.

RTP See Rapid Transport Protocol.

RTP connection
See Rapid Transport Protocol connection.

RTP pipe
See Rapid Transport Protocol connection.

RTS See request to send.

RU

1. See response unit.
2. See request unit.
3. See request/response unit.

RU chain
In SNA, a set of related request or response units that are transmitted consecutively on a particular normal or expedited data flow. See also first-in-chain, last-in-chain, middle-in-chain, only-in-chain.

rule A set of conditional statements that enable computer systems to identify relationships and run automated responses accordingly.

run-length encoding (RLE)
A type of compression that is based on strings of repeated, adjacent characters or symbols, which are called "runs."

S

SAF See System Authorization Facility.

same-domain
Pertaining to communication between entities in the same SNA domain. See also cross-domain.

SAP See service access point.

SATF See shared access transport facility.

SAW data
See session awareness data.

SBA See set buffer address.

SBCS See single-byte character set.

SC See session control.

scalable
Pertaining to the capability of a system to adapt readily to a greater or lesser intensity of use, volume, or demand. For example, a scalable system can efficiently adapt to work with larger or smaller networks performing tasks of varying complexity.

scan attack
An attack in which a host on the network is trying to determine which ports are open on the target host. The host doing the scan may later be the same host that does a more virulent attack.

scanner
A device that examines text, graphics, or bar code patterns and generates electrical signals corresponding to the pattern. It sends the signals to a computing device for processing.

scanner interface trace
A record of the activity within the communication scanner processor (CSP) for a specified data link between an IBM Communication Controller (including Communications Controller for Linux) and a resource.

SCB See session control block.

schema
A collection of database objects such as tables, views, indexes, or triggers that define a database. A schema provides a logical classification of database objects. See also collection.

SCR See sustainable cell rate.

screen The physical surface of a display device upon which information is shown to a user.

SCS See SNA character string.

SDLC See Synchronous Data Link Control.

SDSF See System Display and Search Facility.

SDT See start data traffic.

SDWA
See system diagnostic work area.

SE See Support Element.

secondary application program
An application program that acts as the secondary end of an LU-LU session.

secondary end of a session
An end of a session that uses secondary protocols. For an LU-LU session, the secondary end of the session is the secondary logical unit (SLU). See also half-session, primary end of a session, secondary logical unit.

secondary half-session
In SNA, the half-session that receives the session-activation request. See also primary half-session.

secondary logical unit (SLU)
In SNA, the logical unit (LU) that contains the secondary half-session for one logical unit-to-logical unit (LU-to-LU) session. See also primary logical unit, secondary end of a session.

secondary logical unit key
A key-encrypting key used to protect a session cryptography key during its transmission to the secondary half-session.

secondary program operator application program (SPO)
A program operator application program that is not authorized to receive unsolicited messages. See also primary program operator application program.

secure network
A set of nodes that are controlled by a single administrative party. See also nonsecure network.

Secure Shell (SSH)
A network protocol for secure data exchange between two networked devices. The client can use public-key and private-key authentication, or password authentication, to access the remote server.

Secure Sockets Layer (SSL)
A security protocol that provides communication privacy. With SSL, client/server applications can communicate in a way that is designed to prevent eavesdropping, tampering, and message forgery. See also certificate authority.

security group
A group defined for the purpose of providing access to applications and optionally to collections of data.

security management
The management discipline that addresses the organization's ability to control access to applications and data that are critical to its success. See also availability management, deployment management, operations and administration.

security token
In the Distributed Computing Environment (DCE), an opaque string of bytes, returned to an LU 6.2 from the Generic Security Service (GSS) application programming interface (API), that must be sent to the partner in order for the authentication process to continue. For example, in Kerberos, the contents of an authentication token would be a ticket and an authenticator; in the DCE the contents would be a ticket, an authenticator, an extended Privilege Attribute Certificate (PAC), and a token-granting ticket for delegation. Because the authentication token is opaque, the LU has no knowledge of the token's contents.

segment
See BIU segment.

segmentation
A process by which path control (PC) divides basic information units (BIUs) into smaller units, called BIU segments, to accommodate smaller buffer sizes in adjacent nodes. Both segmentation and segment assembly are optional PC features. The support for either or both is indicated in the BIND request and response.

segment file
A file that contains all the path segments in a particular configuration segment.

segmenting
In OSI, a function performed by an (N)-entity to map one (N)-service-data-unit into multiple (N)-protocol-data-units.(I) Segmenting is the opposite of reassembly. See also fragmentation.

selective cryptographic session
A cryptographic session in which an application program can specify the request units to be enciphered. See also clear session, cryptographic session, required cryptographic session.

selective data encryption
Data encryption support that enables the logical unit to specify that sensitive data on a session or conversation be encrypted in accordance with the user's request.

semantics
The relationships of characters or groups of characters to their meanings, independent of the manner of their interpretation and use. Semantics is the meaning conveyed by a character string.

semaphore
An indicator used to control access to a file. For example, in a multiuser application, a semaphore is a flag that prevents simultaneous access to a file.

sendmail
In the UNIX operating system, the mail server that uses the Simple Mail Transfer Protocol (SMTP) to route mail from one host to another on the network.

send pacing
In SNA, the pacing of message units that a component is sending. See also receive pacing.

sense code
A value sent or received, or a negative response to indicate what error occurred.

sequence number
1. A numerical value assigned by VTAM to each message exchanged between two nodes. The value (one for messages sent from the application program to the logical unit and another for messages sent from the logical unit to the application program) increases by one for each successive message transmitted unless it is reset by the application program with a set and test sequence numbers (STSN) indicator.
2. In communications, a number assigned to a particular frame or packet to control the transmission flow and receipt of data.

serial Pertaining to the sequential or consecutive occurrence of two or more related activities in a single device or channel. See also parallel.

Serial Line Internet Protocol (SLIP)
An Internet protocol that connects a computer to the Internet using a serial line.

server A software program or a computer that provides services to other software programs or other computers. See also client, host.

service access point (SAP)
A logical address that allows a system to route data between a remote device and the appropriate communications support.

service level agreement (SLA)
A contract between a customer and a service provider that specifies the expectations for the level of service with respect to availability, performance, and other measurable objectives.

service transaction program
A program that provides a function internal to SNA Server. See also application transaction program.

session

1. A logical or virtual connection between two stations, software programs, or devices on a network that allows the two elements to communicate and exchange data for the duration of the session.
2. A resource that controls local logical units (LUs), remote LUs, modes, and attachments.

session activation request
In SNA, a request that activates a session between two network accessible units (NAUs) and specifies session parameters that control various protocols during session activity.

session address space
In VTAM, an address space that is used to issue VTAM macroinstructions that establish sessions. See also ACB address space, associated address space.

session awareness data (SAW data)
Data that is collected by the NetView program about a session that includes the session type, the names of session partners, and information about the session activation status.

session connector
A session-layer component in an APPN network node or in a subarea node boundary or gateway function that connects two stages of a session. Session connectors swap addresses from one address space to another for session-level intermediate routing, segment session message units as needed, and (except for gateway function session connectors) adaptively pace the session traffic in each direction. See also half-session.

session control (SC)
In SNA, one of the components of transmission control. Session control is used to purge data flowing in a session after an unrecoverable error occurs, to resynchronize the data flow after such an error, and to perform cryptographic verification.

session control block (SCB)
In NPM, control blocks in common storage area for session collection.

session cryptography key
In SNA, a data encrypting key that is used to encipher and decipher

function management data (FMD) requests transmitted in an LU-LU session that uses cryptography. See also data-encrypting key.

session-establishment macroinstruction
In VTAM, the set of RPL-based macroinstructions used to initiate, establish, or terminate LU-LU sessions.

session-establishment request
In VTAM, a request to an LU to establish a session. For the primary logical unit (PLU) of the requested session, the session-establishment request is the CINIT sent from the system services control point (SSCP) to the PLU. For the secondary logical unit (SLU) of the requested session, the session-establishment request is the BIND sent from the PLU to the SLU.

session information block (SIB)
A control block that contains information about a particular SNA session.

session-level encryption (SLE)
The encryption of data that is sent to the host from a workstation during a session.

session-level LU-LU verification
An LU 6.2 security service that is used to verify the identity of each logical unit when a session is established.

session-level pacing
A flow control technique that permits a receiving half-session or session connector to control the data transfer rate (the rate at which it receives request units) on the normal flow. It is used to prevent overloading a receiver with unprocessed requests when the sender can generate requests faster than the receiver can process them. See also adaptive session-level pacing, fixed session-level pacing, virtual route pacing.

session-level security
For logical unit (LU) 6.2, partner LU verification and session cryptography.

session limit
In SNA, the maximum number of concurrently active logical unit to logical unit (LU-to-LU) sessions that a particular logical unit (LU) can support.

session manager (SM)
1. In CDE, a software application that controls saving sessions, restoring sessions, screen locking and unlocking, and the use of screen savers. When a session is saved, the state of the desktop environment (location of icons, size and location of open windows, open/closed status of applications, current color palette, and so on) is preserved so that it can be restored at the next login.
2. An application that allows a user at a terminal to log on to multiple applications concurrently.

session monitor
The component of the NetView program that collects and correlates session-related data and provides online access to this information.

session parameter
In SNA, a parameter that specifies or constrains the protocols (such as bracket protocol and pacing) for a session between two network accessible units (NAUs). See also logon mode.

session partner
In SNA, one of the two network addressable units (NAUs) participating in an active session.

session path
The half-sessions delimiting a given session and their interconnection (including any intermediate session connectors).

session services (SS)
One of the types of network services in the control point (CP) and in the logical unit (LU). These services provide facilities for an LU or a network operator to request that a control point (an ENCP, NNCP, or SSCP) assist with initiating or terminating sessions between logical units. Assistance with session termination is needed only by SSCP-dependent LUs. See also configuration service, maintenance service, management services.

session trace
A function that collects session trace data for sessions that involve either specified resource types or a specific resource. The session trace data consists of session activation parameters, VTAM path information unit data, and network control program (NCP) data.

set buffer address (SBA)
An order used to position data in the buffer of a 3270 terminal, thereby controlling the position of data on the screen. The SBA order is followed by a 2-byte buffer address.

set normal response mode (SNRM)
A data link control command that puts the link connection in normal response mode (NRM).

severity level
A classification for an event that indicates its degree of severity. The predefined severity levels, in order of descending severity, are: fatal, critical, warning, minor, harmless, and unknown.

shadow resource
In VTAM, an alternate representation of a network resource that is retained as a definition for possible future use.

shared
Property of a resource that can be accessed by more than one user at the same time.

shared access transport facility (SATF)
A network fabric that is shared amongst a number of networking partners that provides any-to-any communication between those partners.

share limit
In SNA, the maximum number of control points that can control a network resource concurrently.

shell A software interface between users and an operating system. Shells generally fall into one of two categories: a command line shell, which provides a command line interface to the operating system; and a graphical shell, which provides a graphical user interface (GUI).

shell procedure
See shell script.

shell script
A program, or script, that is interpreted by the shell of an operating system.

shift-in character
A control character (X'0F') that is used in EBCDIC systems to denote that the subsequent bytes represent single-byte character set (SBCS) characters. See also shift-out character.

shift-out character (SO)
A control character (X'0E') that is used in EBCDIC systems to denote that the subsequent bytes, up to the next shift-in control character, represent double-byte character set (DBCS) characters. See also shift-in character.

SHM See short-hold mode.

Shortest Path First (SPF)
A routing algorithm in which each router uses the length of the path to determine the shortest-path spanning tree. Shortest Path First is used by link-state routing protocols.

short-hold mode (SHM)
A mode specified during configuration that allows the DTE to connect or reconnect when no data is being transmitted over a circuit-switched line, while maintaining the logical connection of the sessions across the circuit.

short name
In personal communications, the one-letter name (A through Z) of the presentation space or emulation session.

SIB See session information block.

sift-down effect
The copying of a value from a higher-level resource to a lower-level resource. The sift-down effect applies to many of the keywords and operands in NCP and VTAM definition statements.

signal A mechanism by which a process can be notified of, or affected by, an event occurring in the system. Examples of such events include hardware exceptions and specific actions by processes.

Simple Mail Transfer Protocol (SMTP)
An Internet application protocol for transferring mail among users of the Internet.

Simple Network Management Protocol (SNMP)
A set of protocols for monitoring systems and devices in complex networks. Information about managed devices is defined and stored in a Management Information Base (MIB). See also Management Information Base.

single-byte character set (SBCS)
A coded character set in which each character is represented by a 1-byte code. A 1-byte code point allows representation of up to 256 characters. See also double-byte character set.

SIO See Start I/O.

SLA See service level agreement.

SLE See session-level encryption.

SLIP See Serial Line Internet Protocol.

SLU See secondary logical unit.

SM See session manager.

SMF See System Management Facilities.

SMI See Structure of Management Information.

SMS See storage management subsystem.

SMTP See Simple Mail Transfer Protocol.

SN See subarea node.

SNA See Systems Network Architecture.

SNA character string (SCS)
In SNA, a string of EBCDIC control characters carried within a request/response unit (RU); the string can also contain user data.

SNALINK
See SNA Network Link.

SNA network
The part of the user application network that conforms to the formats and protocols of Systems Network Architecture (SNA). The SNA network consists of network addressable units (NAUs), a gateway function, intermediate session routing function components, and the transport network.

SNA network interconnection (SNI)
The connection, by gateways, of two or more independent SNA networks to allow communication between logical units in those networks. The individual SNA networks retain their independence.

SNA Network Link (SNALINK)
A function that allows the use of an SNA subarea routing network to transfer data using TCP/IP protocols. SNALINK provides an interface between TCP/IP and the SNA network. SNALINK must be defined as an application program to VTAM, which causes LU 0 sessions to be established between the SNALINK logical unit and other logical units in the SNA network.

SNAP See subnetwork access protocol.

snapshot
In Tivoli NetView, a copy of a map that reflects the topology and status of the map's nodes and links at a given moment in time.

SNA terminal
A terminal that supports SNA protocols.

SNATM
See SNA topology manager.

SNA topology manager (SNATM)
A component of NetView for MVS that dynamically collects status and topology data into the Resource Object Data Manager (RODM) for display by the NetView Graphic Monitor Facility (NGMF). SNATM includes the function formerly provided by the NetView APPN Topology and Accounting Manager (APPNTAM).

SNBU See switched network backup.

SNI See SNA network interconnection.

SNMP
See Simple Network Management Protocol.

SNRM
See set normal response mode.

SO See shift-out character.

SOA record
See start-of-authority record.

SOC See sphere of control.

socket An identifier that an application uses to uniquely identify an end point of communication. The user associates a protocol address with the socket by associating a socket address with the socket.

socket address
A data structure that uniquely identifies a specific communications end point. It also specifies the protocol family. For example, a TCP/IP socket address consists of a port number and a host address.

socket interface
A callable TCP/IP programming interface that is used by TCP/IP network applications to communicate with remote TCP/IP partners.

software package
In software distribution, a compressed text file that describes the actions to perform on the target system to which it is distributed.

solicited message
A response from VTAM to a command entered by a program operator. See also program operator, unsolicited message.

source host
The managed node on which the source files and directories referred to in a software package or a file package reside.

source route bridging
In LANs, a bridging method that uses the routing information field in the IEEE 802.5 medium access control (MAC) header of a frame to determine which rings or token-ring segments the frame must transit. The routing information field is inserted into the MAC header by the source node. The information in the routing information field is derived from explorer packets generated by the source host.

source router
In LANs, the router that determines the route that the frame will follow.

source routing
In LANs, a method by which the sending station determines the route the frame will follow and includes the routing information with the frame. Bridges then read the routing information to determine whether they should forward the frame.

source service access point (SSAP)
In SNA and TCP/IP, a logical address that allows a system to send data to a remote device from the appropriate communications support. See also destination service access point.

span A user-defined group of network resources within a single domain. Spans provide a level of security by allowing the system administrator to define (a) the resources to which an operator can issue commands, (b) the views

of resources that an operator can display, and (c) the resources in a view that an operator is allowed to see (an operator might not be authorized to see all the resources in a particular view). See also span of control.

span of control
The total network resources over which a particular network operator has control. All the network resources listed in spans associated through profile definition with a particular network operator are within that operator's span of control. See also span.

specific mode
In VTAM, (a) the form of a RECEIVE request that obtains input from one specific session and (b) the form of an ACCEPT request that completes the establishment of a session by accepting a specific queued CINIT request.

SPF See Shortest Path First.

sphere of control (SOC)
In SNA, a collection of network node control points for which another system is acting as a focal point. This collection includes both control points explicitly defined by the customer, if the controlling system is a primary focal point, and control points assumed by the system if the controlling system is a default focal point.

SPO See secondary program operator application program.

spoofing
The practice of masquerading as a trusted system to try to obtain confidential information. For example, when a would-be intruder sets up a client system with an IP address that is trusted by another system, it is called IP spoofing.

spool

1. The system function of putting files or jobs into disk storage for later processing or printing.
2. To reduce, through the use of auxiliary storage as buffer storage, processing delays when transferring data between peripheral equipment and the processors of a computer.

SPS See sync point services.

SQL See Structured Query Language.

SS

1. See session services.
2. See start-stop.

SSAP See source service access point.

SSCP See system services control point.

SSCP-LU session
In SNA, a session between a system services control point (SSCP) and a logical unit (LU). The session enables the LU to request the SSCP to help initiate LU-LU sessions.

SSCP-PU session
In SNA, a session between a system services control point (SSCP) and a physical unit (PU); SSCP-PU sessions allow SSCPs to send requests to and receive status information from individual nodes in order to control the network configuration.

SSCP rerouting
In SNA network interconnection, the technique used by the gateway system services control point (SSCP) to send session-initiation request units (RUs), by way of a series of SSCP-SSCP sessions, from one SSCP to another, until the owning SSCP is reached.

SSCP-SSCP session
In SNA, a session between the system services control point (SSCP) in one domain and the SSCP in another domain. An SSCP-SSCP session is used to initiate and terminate cross-domain LU-LU sessions.

SSCP takeover
See resource takeover.

SSH See Secure Shell.

SSL See Secure Sockets Layer.

SSP See System Support Program.

stack See protocol stack.

stage A program that processes messages in a NetView pipeline. Stages send messages to each other serially.

stand-alone dump
A printout of main storage requested separately from normal system operations, which does not require the system to be in a condition for normal operations.

standard MIB
In the Simple Network Management Protocol (SNMP), a MIB module that is located under the management branch of the Structure of Management Information (SMI) and that is considered a standard by the Internet Engineering Task Force (IETF).

standard output (STDOUT)
The output stream to which data is directed. Standard output is normally associated with the console, but if redirection or piping is used, the standard output can be a file or the input to a command.

start data traffic (SDT)
In SNA, a command issued by the primary logical unit, which allows user data to be sent on the logical unit-to-logical unit (LU-to-LU) session.

started task
In MVS, a process that begins at system start and runs unattended. Started tasks are generally used for critical applications. The UNIX equivalent of a started task is a daemon.

Start I/O (SIO)
A machine instruction asking a channel to start the execution of the I/O operation.

start-of-authority record (SOA record)
In the Domain Name System (DNS), the resource record that defines a zone.

start option
In VTAM, a user-specified or IBM-supplied option that determines certain conditions that are to exist during the time a VTAM system is operating. Start options can be predefined or specified when VTAM is started.

start-stop (SS)
Pertaining to asynchronous communications line control that uses start signals and stop signals to control the transfer of data over a communications line. Each group of signals representing a character is preceded by a start signal and followed by a stop signal. See also asynchronous communication.

statement
In programming languages, a language construct that represents a step in a sequence of actions or a set of declarations.

static Pertaining to an operation that occurs at a predetermined or fixed time. See also dynamic.

static route
A route between hosts, between networks, or between a host and a network, that is entered into a routing table.

static routing
A method of setting paths between hosts, networks, or both by manually entering routes into the routing table. Static routes are not affected by routing daemons and must be updated manually.

static system symbol
In MVS, a symbol whose substitution text is defined at system initialization and remains fixed during the initial program load (IPL). Static system symbols are used to represent fixed values, such as system names.

station
An input or output point of a system that uses telecommunication facilities; for example, one or more systems, computers, terminals, devices, and associated programs at a particular location that can send or receive data over a telecommunication line. See also attaching device.

statistic
In the NetView program, a resource-generated database record that contains recoverable error counts, traffic, and other significant data about a resource.

status The current condition or state of a program or device, for example, the status of a printer.

status code
In VTAM, information on the status of a resource as shown in a 10-character state code; for example, STATEACTIV for active.

status modifier
An indicator, either in a status code or status message, that provides detailed information about the state of an object or operation.

STDOUT
See standard output.

storage
A functional unit into which data can be placed, in which it can be retained, and from which it can be retrieved. See also virtual storage.

storage management subsystem (SMS)
Software that automates as much as possible the management of physical storage by centralizing control, automating tasks, and providing interactive controls for system administrators.

stream
To send data from one device to another.

Structured Query Language (SQL)
A standardized language for defining and manipulating data in a relational database.

Structure of Management Information (SMI)
In the Simple Network Management Protocol (SNMP), the rules used to define the objects that can be accessed by means of a network management protocol.

stub A program module that transfers remote procedure calls (RPCs) and responses between a client and a server. Stubs perform marshalling, unmarshalling, and data format conversion. Both clients and servers have stubs. The Network Interface Definition Language (NIDL) compiler generates client and server stub code from an interface definition.

stub area
In the OSPF protocol, a routing area for which packets can flow into and out of, but not through.

subagent
An extension to an SNMP agent that permits a user to dynamically add, or in some cases replace, management variables in the local MIB, thereby providing a means of extending the range of information that network managers may access.

subarea
A portion of the SNA network consisting of a subarea node, attached peripheral nodes, and associated resources. Within a subarea node, all network addressable units (NAUs), links, and adjacent link stations in attached peripheral or subarea nodes that are addressable within the subarea share a common subarea address and have distinct element addresses. See also adjacent subarea.

subarea address
In SNA, a value in the subarea field of the network address that identifies a specific subarea. See also element address.

subarea link
In SNA, a link that connects two subarea nodes. See also channel link.

subarea network
A network in which interconnected subareas, their directly-attached peripheral nodes, and the transmission groups that connect them are linked.

subarea node (SN)
In SNA, a type 4 or type 5 node that uses network addresses for routing and whose routing tables are, therefore, affected by changes in the configuration of the network. Subarea nodes can provide boundary function support for peripheral nodes.

subarea subnetwork
In NetDA/2, a group of subarea nodes that are connected through subarea protocols and have the same network ID.

subdirectory
A directory contained within another directory in a file system hierarchy.

subnet
See subnetwork.

subnet address
In Internet communications, an extension to the basic IP addressing scheme where a portion of the host address is interpreted as the local network address.

subnet mask
For internet subnetworking, a 32-bit mask used to identify the subnetwork address bits in the host portion of an IP address. See also address mask.

subnetwork (subnet)
A network that is divided into smaller independent subgroups, which still are interconnected.

subnetwork access protocol (SNAP)
In LANs, a 5-byte protocol discriminator that identifies the non-IEEE standard protocol family to which a packet belongs. The SNAP value is used to differentiate between protocols that use $AA as their service access point (SAP) value.

subnetwork mask
A bit mask of 32 bits that defines the particular subnetwork to which an interface attaches. See also address mask.

suboperand
One of multiple elements in a list that comprises an operand. See also definition statement.

subport
An access point for data entry or exit over a logical connection. The relationship between the physical line and the port is analogous to the relationship between the logical connection and the subport. See also frame handler subport.

subroutine
A sequence of instructions within a larger program that performs a particular task. A subroutine can be accessed repeatedly, can be used in more than one program, and can be called at more than one point in a program.

substitution text
The character string that is substituted for a symbol.

subsystem
A secondary or subordinate system, usually capable of operating independently of, or asynchronously with, a controlling system.

subvector
In the network management vector transport (NMVT), a subcomponent of the major vector.

superuser authority
The unrestricted ability to access and modify any part of the operating system, usually associated with the user who manages the system.

supervisor
The part of a control program that coordinates the use of resources and maintains the flow of processor operations.

supervisor call (SVC)
A request that serves as the interface into operating system functions, such

as allocating storage. The SVC protects the operating system from inappropriate user entry. All operating system requests must be handled by SVCs.

Support Element (SE)
A hardware unit that provides communications, monitoring, and diagnostic functions to a central processor complex (CPC).

surrogate owner
A VTAM node that provides APPN network services for a resource connected over a LEN link.

sustainable cell rate (SCR)
The maximum average rate at which an asynchronous transfer mode (ATM) endsystem can transmit cells into the network. The "on" and "off" cycles of transmission are averaged to determine the sustainable cell rate. See also maximum burst size, peak cell rate.

SVC
1. See supervisor call.
2. See switched virtual channel.

SVC dump
A dump that is issued when a z/OS or a DB2 functional recovery routine detects an error.

switch A network infrastructure component to which multiple nodes attach. Unlike a hub, a switch typically has internal bandwidth that is a multiple of link bandwidth and the ability to rapidly switch a node connection from one to another. A typical switch can accommodate several simultaneous full-link bandwidth transmissions between different pairs of nodes.

switched connection
1. A connection that is established by dialing. See also nonswitched connection.
2. A mode of operating a data link in which a circuit or channel is established to switching facilities as, for example, in a public switched network.

switched line
In data communications, a connection between computers or devices that is established by dialing. See also nonswitched line.

switched major node
In VTAM, a major node whose minor nodes are physical units and logical units attached by switched SDLC links.

switched network
Any network in which connections are established by closing switches, for example, by dialing.

switched network backup (SNBU)
A modem feature that allows a nonswitched line to be used alternatively as a switched line or allows a switched line to be used as a nonswitched line depending on the characteristics of the modem.

switched virtual channel (SVC)
In asynchronous transfer mode (ATM), a temporary connection between two users that is established when one user calls another. Although this is similar in concept to one person's calling another person on the telephone, the signaling techniques are different. See also permanent virtual channel.

switched virtual circuit
A virtual circuit that is requested by a virtual call. It is released when the virtual circuit is cleared.

symptom string
A structured character string written to a file when VTAM detects certain error conditions.

synchronization point
A point in time from which IMS or an application program can start over if a failure makes recovery necessary. The two types of synchronization points are system checkpoints done by IMS itself, and application program synchronization points (also known as commit points) done on behalf of individual application programs.

synchronous
1. Occurring with a regular or predictable time relationship.
2. Pertaining to two or more processes that depend upon the occurrences of specific events, such as a common timing signal. See also asynchronous.

Synchronous Data Link Control (SDLC)
A protocol for managing synchronous information transfer over a data link connection. See also binary synchronous communication.

synchronous operation
In VTAM, a communication, or other operation in which VTAM, after receiving the request for the operation, does not return control to the program until the operation is completed. See also asynchronous communication, asynchronous operation.

synchronous request
In VTAM, a request for a synchronous operation. See also asynchronous request.

sync point
A point during the processing of a transaction at which protected resources are consistent.

sync point services (SPS)
The component of the sync point manager that is responsible for coordinating the managers of protected resources during sync point processing. SPS coordinates two-phase commit protocols, resync protocols, and logging.

SYN flood
A type of denial-of-service attack in which an attacker sends a large number of TCP connection requests to a target computer, without answering the target computer's acknowledgment requests. The target computer becomes overloaded and denies service to legitimate users.

SYSGEN
See system generation.

sysplex
A set of z/OS systems that communicate with each other through certain multisystem hardware components and software services.

sysplex distributor
A software function in z/OS communication server that increases availability through a combination of dynamic VIPA and the z/OS Workload Manager.

system
A set of individual components, such as people, machines, or methods, that work together to perform a function.

System Authorization Facility (SAF)
A z/OS interface with which programs can communicate with an external security manager, such as RACF. See also command authorization.

system configuration
A process that specifies the devices and programs that form a particular data processing system.

system definition
The process, completed before a system is put into use, by which desired functions and operations of the system are selected from various available options.

system diagnostic work area (SDWA)
In a z/OS environment, the data that is recorded in a SYS1.LOGREC entry that describes a program or hardware error.

System Display and Search Facility (SDSF)
An IBM-licensed program that provides a menu-driven full-screen interface that is used to obtained detailed information about jobs and resources in a system.

system generation (SYSGEN)
See system definition.

System Management Facilities (SMF)
A component of z/OS that collects and records a variety of system and job-related information.

system operator
The person responsible for performing system-oriented procedures. See also systems programmer.

system services control point (SSCP)
A focal point in an SNA network for managing configuration, coordinating network-operator and problem-determination requests, and providing directory support or other session services for network users.

system services control point identifier
In SNA, a number uniquely identifying a system services control point. The SSCP ID is used in requests sent to physical units and to other system services control points.

Systems Network Architecture (SNA)
The description of the logical structure, formats, protocols, and operational sequences for transmitting information through and controlling the configuration and operation of networks.

systems programmer
A programmer who plans, maintains, and controls the use of an operating system with the aim of improving overall productivity of an installation. See also system operator.

System Support Program (SSP)
An IBM licensed program, made up of a collection of utilities and small programs, that supports the operation of the Network Control Program (NCP).

T

T1 A digital trunking facility standard used in the United States and elsewhere, capable of transmitting and receiving 24 digitized voice or data channels. Signaling can be imbedded in the voice channel transmission when robbed-bit signaling is used. The transmission rate is 1544 kilobits per second.

takeover
In an XRF environment, the process by which the failing active IMS is released from its XRF sessions with terminal users and replaced by an alternate IMS. See also giveback.

TAP See Trace Analysis Program.

task

1. A unit of work to be accomplished by a device or process.
2. In a Tivoli environment, the definition of an action that must be routinely performed on various managed resources throughout the network. A task defines the executables to be run; the authorization role required to execute the task; and the user or group name under which the task will execute.

task control
In CICS, a program that synchronizes CICS task activity. Under task control, the highest priority task that is ready for processing is started next.

task control block (TCB)
A z/OS control block that is used to communicate information about tasks within an address space that is connected to a subsystem.

task-related user exit (TRUE)
A user exit program that is associated with specified events in a particular task, rather than with every occurrence of a particular event in CICS processing (as is the case with global user exits).

TCAM
See Telecommunications Access Method.

TCB See task control block.

TCID See transport connection identifier.

TCP See Transmission Control Protocol.

TCP/IP
See Transmission Control Protocol/Internet Protocol.

TDU See topology database update.

Telecommunications Access Method (TCAM)
An access method used to transfer data between main storage and remote or local storage.

Telecommunication Standardization Sector
See International Telecommunication Union Telecommunication Standardization Sector.

teletypewriter exchange service (TWX)
Teletypewriter service in which suitably arranged teletypewriter stations are provided with lines to a central office for access to other such stations throughout the U.S. and Canada. Both baudot- and ASCII-coded machines are used. Business machines may also be used, with certain restrictions.

Telnet In TCP/IP, a protocol that provides remote-terminal connection service. Telnet enables users of one host to log on to a remote host and interact as if they were directly attached terminal users of that host.

temporary error
A resource failure that can be resolved by error recovery programs. See also permanent error.

terminal
In data communication, a device, usually equipped with a keyboard and display device, capable of sending and receiving information.

terminal emulator
A program that allows a device such as a microcomputer or personal computer to enter and receive data from a computer system as if it were a particular type of attached terminal.

terminal operator
The user of an Emulator High-Level Language Application Programming Interface (EHLLAPI) application program.

terminate-and-stay-resident program (TSR program)
A program that installs part of itself as an extension of DOS when it is executed.

TFTP See Trivial File Transfer Protocol.

TG See transmission group.

TH See transmission header.

thread A stream of computer instructions that is in control of a process. In some operating systems, a thread is the smallest unit of operation in a process. Several threads can run concurrently, performing different jobs.

threshold
A level set in the system at which a message is sent or an error-handling program is called. For example, in a user auxiliary storage pool, the user can set the threshold level in the system values, and the system notifies the system operator when that level is reached.

throughput
1. In data communications, the total traffic between stations over a period of time.
2. The measure of the amount of work performed by a device, such as a computer or printer, over a period of time, for example, number of jobs per day.

TIC See token-ring interface coupler.

timeout
A time interval that is allotted for an event to occur or complete before operation is interrupted.

Time Sharing Option (TSO)
A base element of the z/OS operating system with which users can interactively work with the system. See also Interactive System Productivity Facility.

Time Sharing Option Extensions (TSO/E)
A licensed program that is based on Time Sharing Option (TSO). With TSO/E, z/OS users can interactively share computer time and resources.

time stamp
The value of an object that indicates the system time at some critical point in the object's history.

time to live (TTL)
A technique used by best-effort delivery protocols to inhibit endlessly looping packets. The packet is discarded if the TTL counter reaches 0.

TLS See Transport Layer Security.

TN3270
A standard protocol for transmitting 3270 data streams over Telnet.

TN3270E Server
A component of Communications Server that enables a TCP/IP client workstation to communicate with with an SNA-based host application by transmitting 3270 datastream information over a TCP/IP connection.

toggle To switch between two modes on a computer or network; for example, to switch between data entry and command entry modes or between stand-alone operation and device emulation.

token A particular message or bit pattern that signifies permission or temporary control to transmit over a network.

token ring
According to IEEE 802.5, network technology that controls media access by passing a token (special packet or frame) between media-attached stations. See also local area network.

token-ring interface coupler (TIC)
An adapter that can connect IBM Communication Controller to an IBM Token-Ring Network.

token-ring network
A local area network that connects devices in a ring topology and allows unidirectional data transmission between devices by a token-passing procedure. A device must receive a token before it can transmit data. See also local area network.

topology
The physical or logical mapping of the location of networking components or nodes within a network. Common network topologies include bus, ring, star, and tree.

topology and routing services (TRS)
An APPN control point component that manages the topology database and computes routes.

topology database update (TDU)
A message about a new or changed link or node that is broadcast among APPN network nodes to maintain the network topology database, which is fully replicated in each network node. TDU messages contain identifying

information, node and link characteristics, and resource sequence numbers to identify the most recent updates for each of the resources described in the TDU.

topology subnetwork
A group of APPN nodes that share a common topology database.

TP
1. See transmission priority.
2. See transaction program.

TPF See Transaction Processing Facility.

trace A record of the processing of a computer program or transaction. The information collected from a trace can be used to assess problems and performance.

Trace Analysis Program (TAP)
See Advanced Communications Function/Trace Analysis Program.

trace services
A menu-driven utility that is used to trace application programming interfaces (APIs) and data transmitted on communication links.

transaction code
A 1- to 8-character alphanumeric code that calls an IMS message processing program.

Transaction Processing Facility (TPF)
An IBM platform for high volume, online transaction processing. It is used by industries demanding large transaction volumes such as airlines and banks. See also program update tape.

transaction program (TP)
1. A program that processes transactions in an SNA network.
2. A program that uses the Advanced Program-to-Program Communications (APPC) application programming interface (API) to communicate with a partner application program on a remote system.

transfer mode
Aspects covering transmission, multiplexing, and switching in a communications network.

translation table
A table used to convert between one form of data and another. For example, translation tables are used for language translation, compression, encoding, and address mapping.

transmission control character
A control character used to control or facilitate transmission of data between data terminal equipments.

Transmission Control Protocol (TCP)
A communication protocol used in the Internet and in any network that follows the Internet Engineering Task Force (IETF) standards for internetwork protocol. TCP provides a reliable host-to-host protocol in packet-switched communication networks and in interconnected systems of such networks. See also Internet Protocol.

Transmission Control Protocol/Internet Protocol (TCP/IP)
An industry-standard, nonproprietary set of communication protocols that

provides reliable end-to-end connections between applications over interconnected networks of different types.

transmission group (TG)
In SNA, a group of links between directly attached nodes appearing as a single logical link for routing messages. A transmission group may consist of one or more SDLC links (parallel links) or of a single System/370 channel. For type 2.1 nodes in System i networks, a transmission group can only be a single-link connection.

transmission group profile
In VTAM, a named set of characteristics (such as cost per byte, cost per unit of time, and capacity) that is used for APPN links.

transmission group vector
A representation of an endpoint TG in a T2.1 network that consists of two control vectors: the TG Descriptor (X'46') control vector and the TG Characteristics (X'47') control vector.

transmission header (TH)
In SNA, control information, optionally followed by a basic information unit or a basic information unit segment, that is created and used by path control to route messages within the network.

transmission priority (TP)
A rank assigned to a message unit that determines its precedence for being selected by the path control component in each node along a route for forwarding to the next node in the route. The four possible values are low, medium, high, and network.

transmission services profile (TS profile)
In SNA, specified in a request to start a session. Each defined transmission services profile is identified by a number.

transmission subsystem component (TSC)
The component of VTAM that comprises the transmission control, path control, and data link control layers of SNA.

transparent mode
A mode of binary synchronous transmission in which transmission control characters are treated as text unless they are preceded by the data link escape character (DLE). See also nontransparent mode.

transport connection identifier (TCID)
An 8-byte hexadecimal value that is used to uniquely identify a High-Performance Routing (HPR) pipe to VTAM.

transport layer
1. In OSI architecture, the layer that provides services for flow control and recovery between open systems with a predictable quality of service.
2. A network service that provides end-to-end communication between two parties, while hiding the details of the communication network. The Transmission Control Protocol (TCP) and ISO TP4 transport protocols provide full-duplex virtual circuits on which delivery is reliable, error free, sequenced, and duplicate free.

Transport Layer Security (TLS)
An Internet Engineering Task Force (IETF)-defined security protocol that is based on Secure Sockets Layer (SSL) and is specified in RFC 2246.

transport network
The part of the SNA network that includes the data link control and path control layers.

transport protocol
A specification of the rules that govern the exchange of information between components of a transport network; for example, the User Datagram Protocol (UDP).

transport provider
In MPTN architecture, a component that provides the transport functions associated with a particular transport protocol stack.

trap In the Simple Network Management Protocol (SNMP), a message sent by a managed node (agent function) to a management station to report an exception condition.

tree structure
A data structure that represents entities in nodes, with at most one parent node for each node, and with only one root node.

Trivial File Transfer Protocol (TFTP)
In Internet communications, a set of conventions that transfers files between hosts using minimal protocol.

TRS See topology and routing services.

TRUE See task-related user exit.

trunk In telephony, circuits that connect two switching systems, as opposed to connecting a customer line to a switching system.

TSC See transmission subsystem component.

TSO See Time Sharing Option.

TSO/E See Time Sharing Option Extensions.

TS profile
See transmission services profile.

TSR program
See terminate-and-stay-resident program.

TTL See time to live.

tuning
The process of adjusting an application, a system, or system control variables to operate in a more efficient manner.

tunnel See IP tunnel.

tunneling
Treating a transport network as though it were a single communication link or local area network (LAN).

TWX See teletypewriter exchange service.

U

UA See unnumbered acknowledgment.

UDP See User Datagram Protocol.

underlying connection
The representation of lower-layer connectivity that is used by higher-layer

connectivity. For example, the physical connection that transports data between two IP hosts is an underlying connection.

unformatted
In VTAM, pertaining to commands (such as LOGON or LOGOFF) entered by a user and sent by a logical unit in character form. The character-coded command must be in the syntax defined in the user's unformatted system services definition table. See also converted command, field-formatted.

unformatted system service (USS)
A communications function that translates a character-coded command, such as a LOGON or LOGOFF command, into a field-formatted command for processing by formatted system services. See also field-formatted, formatted system service.

UNI See user-to-network interface.

unicast
Transmission of data to a single destination. See also broadcast, multicast.

Uniform Resource Locator (URL)
The unique address of an information resource that is accessible in a network such as the Internet. The URL includes the abbreviated name of the protocol used to access the information resource and the information used by the protocol to locate the information resource.

uninterpreted name
In SNA, a character string that a system services control point (SSCP) can convert into the network name of a logical unit (LU). Typically, an uninterpreted name is used in a logon or Initiate request from a secondary logical unit (SLU) to identify the primary logical unit (PLU) with which the session is requested. See also network name.

UNIX A highly portable operating system that features multiprogramming in a multiuser environment. The UNIX operating system was originally developed for use on minicomputers, but was adapted for mainframes and microcomputers. The AIX operating system is IBM's implementation of the UNIX operating system.

unnumbered acknowledgment (UA)
In communications, a data link command or response that acknowledges the receipt and acceptance of the SABM, SABME, and DISC command protocol data units.

unsolicited message
A message that is not a response to a command. See also program operator, solicited message.

upload
To transmit data from a computer to a central computer or network, or to an attached device such as a printer.

URL See Uniform Resource Locator.

user Any individual, organization, process, device, program, protocol, or system that uses the services of a computing system.

user correlator
A 4-byte value supplied to VTAM by an application program when certain macroinstructions (such as REQSESS) are issued. It is returned to the application program when subsequent events occur (such as entry to a

SCIP exit routine upon receipt of BIND) that result from the procedure started by the original macroinstruction.

User Datagram Protocol (UDP)
An Internet protocol that provides unreliable, connectionless datagram service. It enables an application program on one machine or process to send a datagram to an application program on another machine or process.

user exit
A customized routine that takes control at a specific point in an application. See also installation exit.

user exit queue
A structure built by VTAM that is used to serialize the execution of application program exit routines. Only one user exit routine on each user exit queue can run at a time.

user exit routine
A user-written routine that receives control at predefined user exit points.

user profile
A description of a user that includes such information as user ID, user name, password, access authority, and other attributes that are obtained when the user logs on. See also profile.

user-to-network interface (UNI)
The interface between the ATM endsystem (the user) and the ATM network.

USS See unformatted system service.

UTC See Coordinated Universal Time.

V

validation
The checking of data or code for correctness or for compliance with applicable standards, rules, and conventions.

validity check
A check to determine if a code group is actually a character of the particular code in use.

value The content of a variable, parameter, special register, or field.

variable
A representation of a changeable value.

VCI See virtual channel identifier.

vector

1. In SNA, a data structure containing three fields: a length field that specifies the length of the vector in which it is contained, an identifier or type field, and a value field. The value field may contain subvectors.
2. An array of one dimension.

verb A reserved word that expresses an action to be taken by an application programming interface (API), a compiler, or an object program. See also LU 6.2 verb.

version
A separately licensed program that typically has significant new code or new function.

vertex In graphs, a point that is the end of an arc or the intersection of multiple arcs.

VIPA See virtual IP address.

virtual call facility
In data communication, a user facility in which a call setup procedure and a call clearing procedure determine a period of communication between two data terminal equipments (DTEs) in which user data is transferred in the network in the packet mode of operation. All user data is delivered from the network in the order it is received by the network.

virtual channel identifier (VCI)
In asynchronous transfer mode (ATM), the locally unique numeric tag in the ATM cell header that is used to identify a virtual channel connection (VCC) within a virtual path connection (VPC). The VCI is unique only in combination with the virtual path identifier (VPI) and is defined by a 16-bit field in the ATM cell header.

virtual IP address (VIPA)
An IP address that is shared among multiple domain names or multiple servers. Virtual IP addressing enables one IP address to be used either when insufficient IP addresses are available or as a means to balance traffic to multiple servers.

virtual link
In Open Shortest Path First (OSPF), a point-to-point interface that connects border routers that are separated by a non-backbone transit area.

virtual local area network (VLAN)
A logical association of switch ports based upon a set of rules or criteria, such as Medium Access Control (MAC) addresses, protocols, network address, or multicast address. This concept permits the LAN to be segmented again without requiring physical rearrangement.

virtual machine (VM)

1. An instance of a data-processing system that appears to be at the exclusive disposal of a single user, but whose functions are accomplished by sharing the resources of a physical data-processing system.
2. In z/VM, the operating system that represents the virtual processors, virtual storage, virtual devices, and virtual channel subsystem allocated to a single user. A virtual machine also includes any expanded storage dedicated to it.

virtual node

1. The node associated with a connection network when a route is calculated that goes through that connection network.
2. The structure that contains information about a file system object in an virtual file system (VFS).

virtual path connection (VPC)
In asynchronous transfer mode (ATM), a group of virtual channel connections that are switched together as one unit.

virtual path identifier (VPI)
In asynchronous transfer mode (ATM), an 8-bit field in the ATM cell header at the user-to-network interface (UNI) that indicates the virtual path connection over which a cell is to be routed.

virtual private network (VPN)
An extension of a company intranet over the existing framework of either a public or private network. A VPN ensures that the data that is sent between the two endpoints of its connection remains secure. See also Internet Protocol Security.

virtual route (VR)
In SNA, either (a) a logical connection between two subarea nodes that is physically realized as a particular explicit route or (b) a logical connection that is contained wholly within a subarea node for intranode sessions. A virtual route between distinct subarea nodes imposes a transmission priority on the underlying explicit route, provides flow control through virtual route pacing, and provides data integrity through sequence numbering of path information units (PIUs). See also explicit route, path, route extension.

virtual-route-based transmission group
A transmission group that represents the virtual routes connecting the domains of the following nodes across a subarea network: (a) two interchange nodes, (b) an interchange node and a migration data host, or (c) two migration data hosts.

virtual route identifier (VRID)
In SNA, a virtual route number and a transmission priority number that, when combined with the subarea addresses for the subareas at each end of a route, identify the virtual route.

virtual route pacing (VR pacing)
In SNA, a flow control technique used by the virtual route control component of path control at each end of a virtual route to control the rate at which path information units (PIUs) flow over the virtual route. VR pacing can be adjusted according to traffic congestion in any of the nodes along the route. See also session-level pacing.

virtual route pacing response (VRPRS)
A nonsequenced, supervisory path information unit (PIU) that flows at network priority. It can overtake VR-sequenced PIUs and consists of a transmission header with no basic information unit (BIU) data.

virtual routing node (VRN)
A representation of a node's connectivity to a connection network defined on a shared-access transport facility, such as a token ring.

virtual storage (VS)
The storage space that can be regarded as addressable main storage by the user of a computer system in which virtual addresses are mapped to real addresses. The size of virtual storage is limited by the addressing scheme of the computer system and by the amount of available auxiliary storage, not by the actual number of main storage locations. See also storage.

Virtual Storage Access Method (VSAM)
An access method for direct or sequential processing of fixed-length and variable-length records on disk devices. The records in a VSAM data set or file can be organized in logical sequence by a key field (key sequence), in the physical sequence in which they are written on the data set or file (entry sequence), or by relative-record number.

Virtual Storage Extended (VSE)
A system that consists of a basic operating system (VSE/Advanced Functions), and any IBM supplied and user-written programs required to

meet the data processing needs of a user. VSE and the hardware that it controls form a complete computing system. Its current version is called VSE/ESA.

Virtual Telecommunications Access Method (VTAM)
An IBM licensed program that controls communication and the flow of data in an SNA network.

VIT See VTAM internal trace.

vital product data (VPD)
Information that uniquely defines system, hardware, software, and microcode elements of a processing system.

VLAN See virtual local area network.

VM See virtual machine.

vnode See virtual node.

VPC See virtual path connection.

VPD See vital product data.

VPI See virtual path identifier.

VPN See virtual private network.

VR See virtual route.

VRID See virtual route identifier.

VRN See virtual routing node.

VR pacing
See virtual route pacing.

VRPRS
See virtual route pacing response.

VS See virtual storage.

VSAM
See Virtual Storage Access Method.

VSE See Virtual Storage Extended.

VTAM
See Virtual Telecommunications Access Method.

VTAM application program
A program that has opened an access method control block (ACB) to identify itself to VTAM and that can therefore issue VTAM macroinstructions.

VTAM Common Network Services
A VTAM application program that supports shared connectivity between SNA networks and specific non-SNA networks.

VTAM definition
The process of defining the user application network to VTAM and modifying IBM-defined characteristics to suit the needs of the user.

VTAM definition library
The operating system files or data sets that contain the definition statements and start options filed during VTAM definition.

VTAM internal trace (VIT)
A trace that is used in VTAM to collect data on channel I/O, use of locks, and storage management services.

W

WAN See wide area network.

warm start
A restart that allows reuse of previously initialized input and output work queues. See also cold start.

web See World Wide Web.

weight
For route selection purposes, the degree to which resources (such as nodes and transmission groups) meet the criteria specified by a particular class of service. In APPN route selection, routes of minimum weight are chosen.

well-known port
A standardized port number that enables remote computers to know which port to connect to for a particular network service. This simplifies the connection process because both the sender and receiver know in advance that data bound for a specific process will use a specific port. For example, all systems that offer telnet do so on port 23.

wide area network (WAN)
A network that provides communication services among devices in a geographic area larger than that served by a local area network (LAN) or a metropolitan area network (MAN). See also local area network, metropolitan area network.

widget
A reusable user interface component such as a button, scroll bar, control area, or text edit area, that can receive input from the keyboard or mouse and can communicate with an application or with another widget.

wildcard character
A special character such as an asterisk (*) or a question mark (?) that can be used to represent one or more characters. Any character or set of characters can replace the wildcard character.

window
1. An area of the screen with visible boundaries in which an application program or information is displayed or in which a dialog is presented.
2. In data communications, the number of data packets the data terminal equipment (DTE) or data circuit-terminating equipment (DCE) can send across a logical channel before waiting for authorization to send another data packet. The window is the main method of pacing, or flow control, of packets.

window size
The specified number of frames of information that can be sent before receiving an acknowledgment response.

WLM See Workload Manager.

working directory
The active directory. When a file name is specified without a directory, the current directory is searched.

Workload Manager (WLM)
A component of z/OS that provides the ability to run multiple workloads at the same time within one z/OS image or across multiple images.

workstation
A terminal or personal computer at which a user can run applications and that is usually connected to a mainframe or a network. See also display station.

World Wide Web (web, WWW)
A network of servers that contain programs and files. Many of the files contain hypertext links to other documents available through the network.

wrap In general, to go from the maximum to the minimum in computer storage. For example, the continuation of an operation from the maximum value in storage to the first minimal value.

wrap count
The number of events that can be retained in the database for a specific resource or the number of alerts that are retained in the database.

write access
In computer security, permission to write to an object.

write control character
A character used with a write-type command to specify that a particular operation, or combination of operations, is to be performed at a display station or printer.

write to operator (WTO)
A system service used to send messages to an operator console informing the operator of errors or system conditions that might need correcting. A response is not required.

WTO See write to operator.

WWW See World Wide Web.

X

X.25 A CCITT standard that defines an interface to packet-switched communication services. See also packet switching.

X.25 interface
An interface consisting of a data terminal equipment (DTE) and a data circuit-terminating equipment (DCE) in communication over a link using the procedures described in the CCITT Recommendation X.25.

X.25 NCP Packet Switching Interface (NCP Packet Switching Interface, NPSI)
An IBM licensed program that allows SNA users to communicate over packet switching data networks that have interfaces complying with CCITT Recommendation X.25. It allows SNA programs to communicate with SNA or non-SNA equipment over such networks.

X.25 protocol
The connection-mode network service that the CCITT specifies in Recommendation X.25.

X.400 A CCITT Recommendation for international electronic mail (messages).

X.500 The directory services standard of ITU, ISO, and IEC.

XA See extended architecture.

XCA See external communication adapter.

XCF See cross-system coupling facility.

X Client
An application program that uses the X protocol to communicate windowing and graphics requests to an X Server.

XDR See External Data Representation.

XID See exchange identification.

X/Open Company, Ltd
An industrial consortium that produces specifications and test suites to resolve incompatibilities among different computer systems and software components.

XRF See extended recovery facility.

XSA See extended subarea addressing.

X Server
A program that interprets the X protocol and controls one or more screens, a pointing device, a keyboard, and various resources associated with the X Window System, such as graphics contexts, pixmaps, and color tables.

X Window System
A software system, developed by the Massachusetts Institute of Technology, that enables the user of a display to concurrently use multiple application programs through different windows of the display. The application programs can execute on different computers. See also Athena widget set, Enhanced X-Windows Toolkit.

Z

zombie process

1. A process that terminated but has not been cleaned up by its parent process. The existence of a large number of zombie processes could indicate an errant network daemon or application. Zombie processes are sometimes called lingering terminated processes.
2. A completed operation whose entry remains in the process table without a designated user or kernel space. A process becomes a zombie process if it issues an exit subroutine when its parent process is not running a wait subroutine and has not indicated that it does not intend to wait for its children to finish.

zone A collection of Fibre Channel device ports that are permitted to communicate with each other using the fabric. Types of device ports for zone purposes are node ports (N_ports) or node loop ports (NL_ports). Any two N_ports or NL_ports that are not members of at least one common zone are not permitted to communicate using the fabric.