address translation gateway
See ATG.

AIP
ATM Interface Processor. ATM network interface for Cisco 7000 series routers designed to minimize performance bottlenecks at the UNI. The AIP supports AAL3/4 and AAL5. See also AAL3/4 and AAL5.

APaRT
automated packet recognition/translation. Technology that allows a server to be attached to CDDI or FDDI without requiring the reconfiguration of applications or network protocols. APaRT recognizes specific data link layer encapsulation packet types and, when these packet types are transferred from one medium to another, translates them into the native format of the destination device.

ATG
address translation gateway. Cisco DECnet routing software function that allows a router to route multiple, independent DECnet networks and to establish a user-specified address translation for selected nodes between networks.

ATM Interface Processor
See AIP.

ATM network
Traditional Cisco ATM network built around BPX switches.

ATM network interface card
ESP card that is used as the OC-3 interface to the BPX’s BXM.
Automated Packet Recognition/Translation
See APaRT.

autonomous switching
Feature on Cisco routers that provides faster packet processing by allowing the ciscoBus to switch packets independently without interrupting the system processor.

BIGA
Bus Interface Gate Array. Technology that allows the Catalyst 5000 to receive and transmit frames from its packet-switching memory to its MAC local buffer memory without the intervention of the host processor.

BOBI
break-out/break-in. VNS feature that allows interworking between Euro-ISDN (ETSI) and other VNS-supported signaling variants, such as DPNSS and QSIG.

BPX Service Node
Closely integrated BPX switch, AXIS interface shelf, and extended services processor designed to support ATM and Frame Relay switched virtual circuits, as well as traditional PVCs.

break-out/break-in
See BOBI.

Bus Interface Gate Array
See BIGA.

Call Detail Record
See CDR.

CAM
Cisco Access Manager.

CDP
Cisco Discovery Protocol. Media- and protocol-independent device-discovery protocol that runs on all Cisco-manufactured equipment including routers, access servers, bridges, and switches. Using CDP, a device can advertise its existence to other devices.
and receive information about other devices on the same LAN or on the remote side of a WAN. Runs on all media that support SNAP, including LANs, Frame Relay, and ATM media.

**CDR**
Call Detail Record. VNS record of voice or data SVCs, which includes calling and called numbers, local and remote node names, data and timestamp, elapsed time, and Call Failure Class fields.

**CEF**
Cisco express forwarding.

**CFRAD**
SeeCisco FRAD.

**Channel Interface Processor**
SeeCIP.

**CCIE**
Cisco Certified Internetwork Expert.

**CCNA**
Cisco Certified Network Associate.

**CIP**
Channel Interface Processor. Channel attachment interface for Cisco 7000 series routers. The CIP is used to connect a host mainframe to a control unit, eliminating the need for an FEP for channel attachment.

**C-ISUP**
Proprietary Cisco protocol based on ISUP.

ciscoBus controller
SeeSP.

**Cisco Discovery Protocol**
SeeCDP.
Cisco FRAD
Cisco Frame Relay access device. Cisco product that supports Cisco IOS Frame Relay SNA services and can be upgraded to be a full-function multiprotocol router. The Cisco FRAD connects SDLC devices to Frame Relay without requiring an existing LAN. However, the Cisco FRAD does support attached LANs and can perform conversion from SDLC to Ethernet and Token Ring. See also FRAD.

Cisco Frame Relay access device
See Cisco FRAD.

CiscoFusion
Cisco internetworking architecture that “fuses” together the scalability, stability, and security advantages of the latest routing technologies with the performance benefits of ATM and LAN switching, and the management benefits of VLANs. See also Cisco IOS.

Cisco Internet Operating System
See Cisco IOS.

Cisco IOS
Cisco system software that provides common functionality, scalability, and security for all products under the CiscoFusion architecture. Cisco IOS allows centralized, integrated, and automated installation and management of internetworks, while ensuring support for a wide variety of protocols, media, services, and platforms. See also CiscoFusion.

Cisco Link Services
See CLS.

Cisco Link Services Interface
See CLSI.

Cisco-trunk (private line) call
A Cisco-trunk (private line) call is established by the forced connection of a dynamic switched call. A Cisco-trunk call is established during configuration of the trunk and stays up for the duration of the configuration. It optionally provides a pass-through connection path to pass signaling information between the two telephony interfaces at either end of the connection.
CiscoView
GUI-based device-management software application that provides dynamic status, statistics, and comprehensive configuration information for Cisco internetworking devices. In addition to displaying a physical view of Cisco device chassis, CiscoView also provides device monitoring functions and basic troubleshooting capabilities, and can be integrated with several leading SNMP-based network management platforms.

CLS
Cisco link services. A front-end for a variety of data-link control services.

CLSI
Cisco Link Services Interface. Messages that are exchanged between CLS and data-link users such as APPN, SNA service point, and DLSw+.

cox cable
Type of cable used to connect Cisco equipment to antennas.

configuration register
In Cisco routers, a 16-bit, user-configurable value that determines how the router functions during initialization. The configuration register can be stored in hardware or software. In hardware, the bit position is set using a jumper. In software, the bit position is set by specifying a hexadecimal value using configuration commands.

CPP
Combinet Proprietary Protocol.

CxBus
Cisco Extended Bus. Data bus for interface processors on Cisco 7000 series routers. See also SP.

Data movement processor
See DMP.

Diffusing update algorithm
See DUAL.
DistributedDirector
Method of distributing Web traffic by taking into account Web server availability and relative client-to-server topological distances in order to determine the optimal Web server for a client. DistributedDirector uses the Director Response Protocol to query DRP server agents for BGP and IGP routing table metrics.

DLSw+
data-link switching plus. Cisco implementation of the DLSw standard for SNA and NetBIOS traffic forwarding. DLSw+ goes beyond the standard to include the advanced features of the current Cisco RSRB implementation, and provides additional functionality to increase the overall scalability of data-link switching. See also DLSw in the main glossary.

DMP
Data Movement Processor. Processor on the Catalyst 5000 that, along with the multiport packet buffer memory interface, performs the frame-switching function for the switch. The DMP also handles translational bridging between the Ethernet and FDDI interfaces, IP segmentation, and intelligent bridging with protocol-based filtering.

DRP
Director Response Protocol. Protocol used by the DistributedDirector feature in IP routing.

DSPU concentration
Cisco IOS feature that enables a router to function as a PU concentrator for SNA PU 2 nodes. PU concentration at the router simplifies the task of PU definition at the upstream host while providing additional flexibility and mobility for downstream PU devices.

DUAL
Diffusing Update Algorithm. Convergence algorithm used in Enhanced IGRP that provides loop-free operation at every instant throughout a route computation. Allows routers involved in a topology change to synchronize at the same time, while not involving routers that are unaffected by the change. See also Enhanced IGRP.

EIGRP
See Enhanced IGRP.
EIP
Ethernet Interface Processor. Interface processor card on the Cisco 7000 series routers. The EIP provides high-speed (10-Mbps) AUI ports that support Ethernet Version 1 and Ethernet Version 2 or IEEE 802.3 interfaces, and a high-speed data path to other interface processors.

Enhanced IGRP
Enhanced Interior Gateway Routing Protocol. Advanced version of IGRP developed by Cisco. Provides superior convergence properties and operating efficiency, and combines the advantages of link state protocols with those of distance vector protocols. Compare with IGRP. See also IGP, OSPF, and RIP.

Enhanced Interior Gateway Routing Protocol
See Enhanced IGRP.

Enhanced Monitoring Services
Set of analysis tools on the Catalyst 5000 switch, consisting of an integrated RMON agent and the SPAN. These tools provide traffic monitoring, and network segment analysis and management. See also RMON and span.

ESP
Extended Services Processor. Rack-mounted adjunct processor that is co-located with a Cisco BPX/AXIS (all three units comprise a BPX service node) and has IP connectivity to a StrataView Plus Workstation.

Ethernet Interface Processor
See EIP.

EXEC
Interactive command processor of Cisco IOS.

Extended Services Processor
See ESP.

Fast Ethernet Interface Processor
See FEIP.
Fast Sequenced Transport
See FST.

Fast Serial Interface Processor
See FSIP.

Fast switching
Cisco feature whereby a route cache is used to expedite packet switching through a router. Contrast with process switching.

FDDI Interface Processor
See FIP.

FEIP
Fast Ethernet Interface Processor. Interface processor on the Cisco 7000 series routers. The FEIP supports up to two 100-Mbps 100BaseT ports.

FIP
FDDI Interface Processor. Interface processor on the Cisco 7000 series routers. The FIP supports SASs, DASs, dual homing, and optical bypass, and contains a 16-mips processor for high-speed (100-Mbps) interface rates. The FIP complies with ANSI and ISO FDDI standards.

FRAS
Frame Relay access support. Cisco IOS feature that allows SDLC, Token Ring, Ethernet, and Frame Relay-attached IBM devices to connect to other IBM devices across a Frame Relay network. See also FRAD.

FSIP
Fast Serial Interface Processor. Default serial interface processor for Cisco 7000 series routers. The FSIP provides four or eight high-speed serial ports.

FST
Fast Sequenced Transport. Connectionless, sequenced transport protocol that runs on top of the IP protocol. SRB traffic is encapsulated inside of IP datagrams and is passed over an FST connection between two network devices (such as routers). Speeds up data delivery, reduces overhead, and improves the response time of SRB traffic.
Gateway Discovery Protocol
See GDP.

GDP
Gateway Discovery Protocol. Cisco protocol that allows hosts to dynamically detect the
arrival of new routers as well as determine when a router goes down. Based on UDP.
See also UDP in the main glossary.

generic routing encapsulation
See GRE.

GRE
generic routing encapsulation. Tunneling protocol developed by Cisco that can
encapsulate a wide variety of protocol packet types inside IP tunnels, creating a virtual
point-to-point link to Cisco routers at remote points over an IP internetwork. By
connecting multiprotocol subnetworks in a single-protocol backbone environment, IP
tunneling using GRE allows network expansion across a single-protocol backbone
environment.

helper address
Address configured on an interface to which broadcasts received on that interface will
be sent.

High-Speed Communications Interface
See HSCI.

HIP
HSSI Interface Processor. Interface processor on the Cisco 7000 series routers. The HIP
provides one HSSI port that supports connections to ATM, SMDS, Frame Relay, or
private lines at speeds up to T3 or E3.

Hot Standby Router Protocol
See HSRP.

HSCI
High-Speed Communications Interface. Single-port interface, developed by Cisco,
providing full-duplex synchronous serial communications capability at speeds up to
52 Mbps.
HSRP
Hot Standby Router Protocol. Provides high network availability and transparent network topology changes. HSRP creates a Hot Standby router group with a lead router that services all packets sent to the Hot Standby address. The lead router is monitored by other routers in the group, and if it fails, one of these standby routers inherits the lead position and the Hot Standby group address.

HSSI Interface Processor
See HIP.

IGRP
Interior Gateway Routing Protocol. IGP developed by Cisco to address the issues associated with routing in large, heterogeneous networks. Compare with Enhanced IGRP. See also IGP, OSPF, and RIP.

interface processor
Any of a number of processor modules used in the Cisco 7000 series routers. See AIP, CIP, EIP, FEIP, FIP, FSIP, HIP, MIP, SIP (serial interface processor), and TRIP.

Interior Gateway Routing Protocol
See IGRP.

Inter-Switch Link
See ISL.

IOS
See Cisco IOS.

ISL
Inter-Switch Link. Cisco-proprietary protocol that maintains VLAN information as traffic flows between switches and routers.

LMT
Cisco’s last mile technology.

local adjacency
Two VNSs that control different VSN areas, but communicate with one another through a Frame Relay PVC, are considered to be locally adjacent.
MICA
Multiservice IOS Channel Aggregation. Technology that enables the simultaneous support of remote-access users through both analog modems and ISDN devices.

MIP
MultiChannel Interface Processor. Interface processor on the Cisco 7000 series routers that provides up to two channelized T1 or E1 connections via serial cables to a CSU. The two controllers on the MIP can each provide up to 24 T1 or 30 E1 channel-groups, with each channel-group presented to the system as a serial interface that can be configured individually.

MultiChannel Interface Processor
See MIP.

native client interface architecture
See NCIA.

NCIA
native client interface architecture. SNA applications-access architecture, developed by Cisco, that combines the full functionality of native SNA interfaces at both the host and client with the flexibility of leveraging TCP/IP backbones. NCIA encapsulates SNA traffic on a client PC or workstation, thereby providing direct TCP/IP access while preserving the native SNA interface at the end-user level. In many networks, this capability obviates the need for a standalone gateway and can provide flexible TCP/IP access while preserving the native SNA interface to the host.

NetFlow
Network flow is defined as a unidirectional sequence of packets between given source and destination endpoints. Network flows are highly granular: flow endpoints are identified both by IP address as well as by transport layer application port numbers. (NetFlow also uses IP Protocol, ToS and the input interface port to uniquely identify flows.) Conventional network layer switching handles incoming packets independently, with separate serial tasks for switching, security, services and traffic measurements applied to each packet. With NetFlow switching, this process is applied only to the first packet of a flow. Information from the first packet is used to build an entry in the NetFlow cache. Subsequent packets in the flow are handled via a single streamlined task that handles switching, services, and data collection concurrently.
NETscout
Cisco network management application that provides an easy-to-use GUI for monitoring RMON statistics and protocol analysis information. NETscout also provides extensive tools that simplify data collection, analysis, and reporting. These tools allow system administrators to monitor traffic, set thresholds, and capture data on any set of network traffic for any segment.

NMP
Network Management Processor. Processor module on the Catalyst 5000 switch used to control and monitor the switch.

NSP
Network Service Point.

OPT
Cisco’s Open Packet Telephony architecture.

physical layer interface module
See PLIM.

PLIM
physical layer interface module. Interface that allows the AIP (ATM Interface Processor) to a variety of physical layers, including TAXI and SONET multimode fiber-optic cable, SDH/SONET single-mode fiber cable, and E3 coaxial cable.

process switching
Operation that provides full route evaluation and per-packet load balancing across parallel WAN links. Involves the transmission of entire frames to the router CPU, where they are repackaged for delivery to or from a WAN interface, with the router making a route selection for each packet. Process switching is the most resource-intensive switching operation that the CPU can perform. Contrast with fast switching.

proxy polling
Technique that alleviates the load across an SDLC network by allowing routers to act as proxies for primary and secondary nodes, thus keeping polling traffic off of the shared links. Proxy polling has been replaced by SDLC Transport. See SDLC Transport.
Reliable SAP Update Protocol
See RSUP.

Route Processor
See RP.

Route/Switch Processor
See RSP.

RP
Route Processor. Processor module in the Cisco 7000 series routers that contains the CPU, system software, and most of the memory components that are used in the router. Sometimes called a supervisory processor.

RSP
Route/Switch Processor. Processor module in the Cisco 7500 series routers that integrates the functions of the RP and the SP. See also RP and SP.

RSUP
Reliable SAP Update Protocol. Bandwidth-saving protocol developed by Cisco for propagating services information. RSUP allows routers to reliably send standard Novell SAP packets only when the routers detect a change in advertised services. RSUP can transport network information either in conjunction with or independently of the Enhanced IGRP routing function for IPX.

SDLC broadcast
Feature that allows a Cisco router that receives an all-stations broadcast on a virtual multidrop line to propagate the broadcast to each SDLC line that is a member of the virtual multidrop line.

SDLC Transport
Cisco router feature with which disparate environments can be integrated into a single, high-speed, enterprise-wide network. Native SDLC traffic can be passed through point-to-point serial links with other protocol traffic multiplexed over the same links. Cisco routers can also encapsulate SDLC frames inside IP datagrams for transport over arbitrary (non-SDLC) networks. Replaces proxy polling. See also proxy polling.
SDLLC
SDLC Logical Link Control. Cisco IOS feature that performs translation between
SDLC and IEEE 802.2 type 2.

serial tunnel
See STUN.

silicon switching
Switching based on the SSE, which allows the processing of packets independent of the
SSP (Silicon Switch Processor) system processor. Silicon switching provides
high-speed, dedicated packet switching. See also SSE and SSP (Silicon Switch
Processor).

silicon switching engine
See SSE.

Silicon Switch Processor
See SSP.

SIP
1. SMDS Interface Protocol. Used in communications between CPE and SMDS
network equipment. Allows the CPE to use SMDS service for high-speed WAN
internetworking. Based on the IEEE 802.6 DQDB standard. See also DQDB.

2. serial interface processor.

SP
Switch Processor. Cisco 7000-series processor module that acts as the administrator for
all CxBus activities. Sometimes called ciscoBus controller. See also CxBus.

SPAN
Switched Port Analyzer. Feature of the Catalyst 5000 switch that extends the
monitoring abilities of existing network analyzers into a switched Ethernet
environment. SPAN mirrors the traffic at one switched segment onto a predefined SPAN
port. A network analyzer attached to the SPAN port can monitor traffic from any of the
other Catalyst switched ports.
SPNNI connection
Frame Relay connection between two VNSs in different areas or domains. The SPNNI connection gets its name from the proprietary Network-to-Network Interface protocol that operates over this connection.

SSE
silicon switching engine. Routing and switching mechanism that compares the data link or network layer header of an incoming packet to a silicon-switching cache, determines the appropriate action (routing or bridging), and forwards the packet to the proper interface. The SSE is directly encoded in the hardware of the SSP (Silicon Switch Processor) of a Cisco 7000 series router. It can therefore perform switching independently of the system processor, making the execution of routing decisions much quicker than if they were encoded in software. See also silicon switching and SSP.

SSP
Silicon Switch Processor. High-performance silicon switch for Cisco 7000 series routers that provides distributed processing and control for interface processors. The SSP leverages the high-speed switching and routing capabilities of the SSE to dramatically increase aggregate router performance, minimizing performance bottlenecks at the interface points between the router and a high-speed backbone. See also silicon switching and SSE.

STUN
serial tunnel. Router feature allowing two SDLC- or HDLC-compliant devices to connect to one another through an arbitrary multiprotocol topology (using Cisco routers) rather than through a direct serial link.

supervisory processor
See RP.

Switch Processor
See SP.

TAC
A Cisco Technical Assistance Center. There are 4 TACs worldwide.
TACACS+
Terminal Access Controller Access Control System Plus. Proprietary Cisco enhancement to Terminal Access Controller Access Control System (TACACS). Provides additional support for authentication, authorization, and accounting. See also TACACS in main glossary.

THC over X.25
Feature providing TCP/IP header compression over X.25 links, for purposes of link efficiency.

TRIP
Token Ring Interface Processor. High-speed interface processor on the Cisco 7000 series routers. The TRIP provides two or four Token Ring ports for interconnection with IEEE 802.5 and IBM Token Ring media with ports independently set to speeds of either 4 or 16 Mbps.

two-way simultaneous
See TWS.

TWS
two-way simultaneous. Mode that allows a router configured as a primary SDLC station to achieve better utilization of a full-duplex serial line. When TWS is enabled in a multidrop environment, the router can poll a secondary station and receive data from that station while it sends data to or receives data from a different secondary station on the same serial line.

Versatile Interface Processor
See VIP.

VIP
1. Versatile Interface Processor. Interface card used in Cisco 7000 and Cisco 7500 series routers. The VIP provides multilayer switching and runs Cisco IOS. The most recent version of the VIP is VIP2.
2. virtual IP. Function that enables the creation of logically separated switched IP workgroups across the switch ports of a Catalyst 5000 running Virtual Networking Services software. See also Virtual Networking Services.
virtual IP
See VIP.

Virtual Networking Services
Software on some Catalyst 5000 switches that enables multiple workgroups to be defined across switches and offers traffic segmentation and access control.

VNS
See Virtual Networking Services.

VSC
Cisco’s virtual switch controller.

WorkGroup Director
Cisco SNMP-based network-management software tool. Workgroup Director runs on UNIX workstations either as a standalone application or integrated with another SNMP-based network management platform, providing a seamless, powerful management system for Cisco workgroup products. See also SNMP.