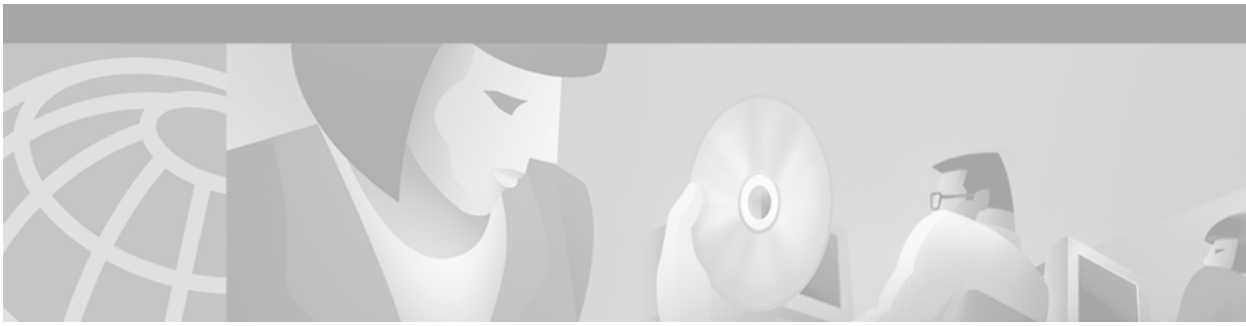

Cisco Systems Terms and Acronyms

A

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*.

ALPS

airline product set. A tunneling mechanism that transports airline protocol data across a Cisco router-based TCP/IP network to an X.25-attached mainframe. This feature provides connectivity between agent set control units (ASCUs) and a mainframe host that runs the airline reservation system database.

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 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.

autonomous switching

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

B

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.

C

CAM

Cisco Access Manager.

CCIE

Cisco Certified Internetwork Expert.

CCNA

Cisco Certified Network Associate.

CCO

Cisco Connection Online. The name of Cisco Systems' external Web site.

CCSRC

Cisco Subscriber Registration Center. An integrated solution for data-over-cable service providers to configure and manage broadband modems, and enable and administer subscriber self-registration and activation.

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.

CEF

Cisco Express Forwarding.

CET

Cisco Encryption Technology. 40- and 56-bit Data Encryption Standard (DES) network layer encryption available since Cisco IOS Software Release 11.2.

CFRAD

See *Cisco FRAD*.

Channel Interface Processor

See *CIP*.

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.

Cisco Discovery Protocol

See *CDP*.

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*.

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.

Cisco Link Services

See *CLS*.

Cisco Link Services Interface

See *CLSI*.

Cisco Network Registrar

A software product that provides IP addresses, configuration parameters, and DNS names to DOCSIS cable modems and PCs, based on network and service policies. CNR also provides enhanced TFTP server capabilities, including the generation of DOCSIS cable modem configuration files.

Cisco ONP

The Cisco Optical Network Planner is the trademarked network planning tool designed by Cisco Systems, Inc. It is designed for use with Cisco ONS 15900 Series Wavelength Router network elements to optimize available optical network bandwidth.

Cisco Optical Network Planner

See Cisco ONP.

Cisco Wavelength Router Manager

See Cisco WRM.

Cisco WRM

Cisco Wavelength Router Manager. Cisco's trademarked element management system designed for use with the Cisco ONS 15900 Series Wavelength Router.

Cisco WW TAC

Cisco's World-Wide Technical Assistance Center. It is the focal point of all Cisco software and hardware maintenance and support services. Contact the Cisco WW TAC for help with installation and testing, performance, training, documentation, equipment repair Return Material Authorization (RMA) service, and equipment specifications. Refer to the About This Guide section of the user guides for additional information.

ciscoBus controller

See *SP*.

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-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.

C-ISUP

Proprietary Cisco protocol based on ISUP.

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+.

CMNM

Cisco MGC Node Manager. The management system providing fault, performance, and security management for the VSC3000 (MGC) node. Also known as Rambler.

CNS/AD

Cisco Networking Services for Active Directory, which consists of a port of Active Directory to Solaris and HP/UX, and an NT and UNIX client implementation of the LDAP API and GSS-API.

coax 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.

CSM

Cisco Service Management system of Operations, Administration, Maintenance, and Provisioning (OAM&P) and management tools for service providers and large enterprise networks. CSRC is part of this system.

CWAF

Cisco Web Application Framework. The underlying framework that manages the Web GUI for User Registrar and Modem Registrar.

CxBus

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

D

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 *EIGRP*.

E

EIGRP

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*.

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 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.

EXEC

Interactive command processor of Cisco IOS.

F

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.

G

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.

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.

H

helper address

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

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.

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.

I

IGRP

Interior Gateway Routing Protocol. IGP developed by Cisco to address the issues associated with routing in large, heterogeneous networks. Compare with *EIGRP*. 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*, and *TRIP*.

IOS

See *Cisco IOS*.

ISL

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

L

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.

M

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.

N

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 the 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.

O

OPI

open peripheral interface. Cisco proprietary interface between Peripheral Gateways (PGs) and the ICM's Central Controller.

OPT

Cisco's Open Packet Telephony architecture.

P

PIM

peripheral interface manager. The Cisco proprietary interface between a peripheral and the Peripheral Gateway (PG).

PLIM

physical layer interface module. Interface that allows the AIP 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 also *SDLC Transport*.

Q

QPM

QoS Policy Manager. Cisco policy server application for dynamically managing network traffic flows.

R

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.

S

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.

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*.

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*.

SPA

Security Posture Assessment. Comprehensive security analysis of large-scale, distributed client networks conducted by Cisco Systems engineers.

SPAN

Switched Port Analyzer. Feature of the Catalyst 5000 switch that extends the monitoring capabilities 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 encoded directly in the hardware of the SSP (Silicon Switch Processor) of a Cisco 7000 series router. It therefore can 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 increase aggregate router performance dramatically, 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.

T

TAC

A Cisco Technical Assistance Center. There are four 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.

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.

V

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 Networking Services

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

VSC

Cisco’s virtual switch controller.

W

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*.