



## A P P E N D I X

# A

## Acronyms

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Table A-1 defines the acronyms that are used in this publication.

**Table A-1 List of Acronyms**

Acronym	Expansion
AAL	ATM adaptation layer
ACE	access control entry
ACL	access control list
ACNS	Application and Content Networking System
AFI	authority and format identifier
Agport	aggregation port
ALPS	Airline Protocol Support
AMP	Active Monitor Present
APaRT	Automated Packet Recognition and Translation
ARP	Address Resolution Protocol
ATA	Analog Telephone Adaptor or Advanced Technology Attachment
ATM	Asynchronous Transfer Mode
AV	attribute value
BDD	binary decision diagrams
BECN	backward explicit congestion notification
BGP	Border Gateway Protocol
Bidir-PIM	bidirectional PIM
BMA	broadcast multiaccess
BPDU	bridge protocol data unit
BRF	bridge relay function
BSC	Bisync
BSR	bootstrap router
BSTUN	Block Serial Tunnel
BUS	broadcast and unknown server
BVI	bridge-group virtual interface

**Table A-1 List of Acronyms (continued)**

<b>Acronym</b>	<b>Expansion</b>
CAM	content-addressable memory
CAR	committed access rate
CASA	Cisco Appliance Services Architecture
CBAC	context based access control
CCA	circuit card assembly
CDP	Cisco Discovery Protocol
CE	customer edge
CEF	Cisco Express Forwarding
CHAP	Challenge Handshake Authentication Protocol
CIR	committed information rate
CIST	Common and Internal Spanning Tree
CLI	command-line interface
CLNS	Connection-Less Network Service
CMM	Communication Media Module
CMNS	Connection-Mode Network Service
CNS	Cisco Networking Services
CoPP	control plane policing
COPS	Common Open Policy Server
COPS-DS	Common Open Policy Server Differentiated Services
CoS	class of service
CPLD	Complex Programmable Logic Device
CRC	cyclic redundancy check
CRF	concentrator relay function
CSM	Content Switching Module
CST	Common Spanning Tree
CUDD	University of Colorado Decision Diagram
CBWFQ	class-based weighted fair queueing
DAI	dynamic ARP inspection
DCC	Data Country Code
dCEF	distributed Cisco Express Forwarding
DDR	dial-on-demand routing
DE	discard eligibility
DEC	Digital Equipment Corporation
DF	designated forwarder
DFC	Distributed Forwarding Card
DFI	Domain-Specific Part Format Identifier

**Table A-1 List of Acronyms (continued)**

<b>Acronym</b>	<b>Expansion</b>
DFP	Dynamic Feedback Protocol
DHCP	Dynamic Host Configuration Protocol
DISL	Dynamic Inter-Switch Link
DLC	Data Link Control
DLCI	data-link connection identifier
DLSw	Data Link Switching
DMP	data movement processor
DNS	Domain Name System
DoD	Department of Defense
DOM	digital optical monitoring
DoS	denial of service
dot1q	802.1Q
dot1x	802.1x
DRAM	dynamic RAM
DRiP	Dual Ring Protocol
DSAP	destination service access point
DSCP	differentiated services code point
DSPU	downstream SNA Physical Units
DSS	Digital Signature Standard
DTP	Dynamic Trunking Protocol
DTR	data terminal ready
DVMRP	Distance Vector Multicast Routing Protocol
DWRR	deficit weighted round robin
DXI	data exchange interface
EAP	Extensible Authentication Protocol
EAPoUDP	Extensible Authentication Protocol over User Datagram Protocol
EARL	Enhanced Address Recognition Logic
EEPROM	electrically erasable programmable read-only memory
EHSA	enhanced high system availability
EIA	Electronic Industries Association
ELAN	Emulated Local Area Network
EOBC	Ethernet out-of-band channel
EOF	end of file
EoMPLS	Ethernet over Multiprotocol Label Switching
ERM	Exception Recovery Manager
ESI	end-system identifier

**Table A-1 List of Acronyms (continued)**

<b>Acronym</b>	<b>Expansion</b>
FAT	File Allocation Table
FIB	Forwarding Information Base
FIE	Feature Interaction Engine
FECN	forward explicit congestion notification
FM	feature manager
FPD	field programmable devices
FRU	field replaceable unit
fsck	file system consistency check
FSM	feasible successor metrics
FSU	fast software upgrade
FTP	file transfer protocol
FWSM	Firewall Services Module
GARP	General Attribute Registration Protocol
GBIC	Gigabit Interface Converter
GBTE	guaranteed bandwidth traffic engineering
GE-WAN	Gigabit Ethernet WAN
GMRP	GARP Multicast Registration Protocol
GVRP	GARP VLAN Registration Protocol
HSRP	Hot Standby Routing Protocol
ICC	Inter-card Communication or interface controller card
ICD	International Code Designator
ICMP	Internet Control Message Protocol
IDB	interface descriptor block
IDP	initial domain part or Internet Datagram Protocol
IDSIM	Intrusion Detection System Module
IFS	IOS File System
IGMP	Internet Group Management Protocol
IGMPv2	IGMP version 2
IGMPv3	IGMP version 3
IGP	Interior Gateway Protocol
IGRP	Interior Gateway Routing Protocol
ILMI	Integrated Local Management Interface
IP	Internet Protocol
IPC	interprocessor communication
IPG	inter packet gap
IPX	Internetwork Packet Exchange

**Table A-1 List of Acronyms (continued)**

<b>Acronym</b>	<b>Expansion</b>
IS-IS	Intermediate System-to-Intermediate System Intradomain Routing Protocol
ISL	Inter-Switch Link
ISL VLANs	Inter-Switch Link VLANs
ISO	International Organization of Standardization
ISR	Integrated SONET router
LACP	Link Aggregation Control Protocol
LACPDU	Link Aggregation Control Protocol data unit
LAN	local area network
LANE	LAN Emulation
LAPB	Link Access Procedure, Balanced
LCP	Link Control Protocol
LDA	Local Director Acceleration
LEC	LAN Emulation Client
LECS	LAN Emulation Configuration Server
LEM	link error monitor
LER	link error rate
LES	LAN Emulation Server
LLC	Logical Link Control
LOU	logical operation units
LTL	Local Target Logic
MAC	Media Access Control
MD5	message digest 5
MDIX	media-dependent interface crossover
MDS	multicast distributed switching
MDSS	Multicast Distributed Shortcut Switching
MDT	multicast distribution tree
MFD	multicast fast drop
MFIB	multicast forwarding information base
mGRE	multipoint generic routing encapsulation
MIB	Management Information Base
MII	media-independent interface
MLDv2	multicast listener discovery version 2
MLS	Multilayer Switching
MLSE	maintenance loop signaling entity
MLSM	multilayer switching for multicast

**Table A-1 List of Acronyms (continued)**

<b>Acronym</b>	<b>Expansion</b>
MN	mobil node
MOP	Maintenance Operation Protocol
MOTD	message-of-the-day
MPLS	Multiprotocol Label Switching
MQC	modular QoS CLI
mrinfo	multicast router information
MRM	multicast routing monitor
mroute	multicast route
mrouter	multicast router
MSDP	Multicast Source Discovery Protocol
MSM	Multilayer Switch Module
MSS	maximum segment size
MST	Multiple Spanning Tree (802.1s)
MSTCI	MST configuration identifier
MTU	maximum transmission unit
MVAP	multiple VLAN access port
NAM	Network Analysis Module
NAT	network address translation
NBMA	nonbroadcast multiaccess
NBP	Name Binding Protocol
NCIA	Native Client Interface Architecture
NDE	NetFlow Data Export
NDR	no drop rate
NET	network entity title
NetBIOS	Network Basic Input/Output System
NFFC	NetFlow Feature Card
NHRP	Next Hop Resolution Protocol
NMP	Network Management Processor
NSAP	network service access point
NSF	non-stop forwarding
NTP	Network Time Protocol
NVGEN	nonvolatile generation
NVRAM	nonvolatile RAM
OAL	optimized ACL logging
OAM	Operation, Administration, and Maintenance
ODM	order dependent merge

**Table A-1 List of Acronyms (continued)**

<b>Acronym</b>	<b>Expansion</b>
OIF	Outgoing interface of a multicast {*,G} or {source, group} flow
OSI	Open System Interconnection
OSPF	open shortest path first
PAE	port access entity
PAgP	Port Aggregation Protocol
PBD	packet buffer daughterboard
P bits	prioritization bits
PBR	policy-based routing
PC	Personal Computer (formerly PCMCIA)
PCM	pulse code modulation
PCR	peak cell rate
PDP	policy decision point
PDU	protocol data unit
PE	provider edge
PEP	policy enforcement point
PE router	provider edge router
PFC	Policy Feature Card
PGM	Pragmatic General Multicast
PHY	physical sublayer
PIB	policy information base
PIR	peak information rate
PIM	protocol independent multicast
PIM-SM	Protocol Independent Multicast sparse mode
PISA	Programmable Intelligent Services Accelerator
PoS	Packet over Sonet
PPP	Point-to-Point Protocol
ppsec	packets per second
PRID	Policy Rule Identifiers
psecure	port security
PVL	per VLAN learning
PVLANS	private VLANs
PVST+	Per-VLAN Spanning Tree+
QDM	QoS device manager
QM	QoS manager
QM-SP	SP QoS manager
QoS	quality of service

**Table A-1 List of Acronyms (continued)**

<b>Acronym</b>	<b>Expansion</b>
QinQ	IEEE 802.1Q in 802.1Q
RACL	router interface access control list
RADIUS	Remote Access Dial-In User Service
RAM	random-access memory
RCP	Remote Copy Protocol
RF	Redundancy Facility
RGMP	Router-Ports Group Management Protocol
RIB	routing information base
RIF	Routing Information Field
RM	routed MAC
RMON	remote network monitor
ROM	read-only memory
ROMMON	ROM monitor
RP	route processor or rendezvous point
RPC	remote procedure call
RPF	reverse path forwarding
RPR	Route Processor Redundancy
RSPAN	remote SPAN
RST	reset
RSTP	Rapid Spanning Tree Protocol
RSTP+	Rapid Spanning Tree Protocol plus
RSVP	ReSerVation Protocol
RTP	Real-Time Transport Protocol
SA	source active
SAID	Security Association Identifier
SAP	service access point
SCM	service connection manager
SCP	Switch-Module Configuration Protocol or Serial Control Protocol
SDLC	Synchronous Data Link Control
SFP	small form factor pluggable
SGBP	Stack Group Bidding Protocol
SIMM	single in-line memory module
SLB	server load balancing
SLCP	Supervisor Line-Card Processor
SLIP	Serial Line Internet Protocol
SMDS	Software Management and Delivery Systems

**Table A-1 List of Acronyms (continued)**

<b>Acronym</b>	<b>Expansion</b>
SMF	software MAC filter
SMP	Standby Monitor Present
SMRP	Simple Multicast Routing Protocol
SMT	Station Management
SNAP	Subnetwork Access Protocol
SNMP	Simple Network Management Protocol
SPAN	Switched Port Analyzer
SREC	S-Record format, Motorola defined format for ROM contents
SRR	shaped round robin
SSL	Secure Sockets Layer
SSM	Source Specific Multicast
SSO	Stateful Switch Over
SSTP	Cisco Shared Spanning Tree
STP	Spanning Tree Protocol
SVC	switched virtual circuit
SVI	switched virtual interface
TACACS+	Terminal Access Controller Access Control System Plus
TARP	Target Identifier Address Resolution Protocol
TCAM	Ternary Content Addressable Memory
TCL	table contention level
TCP/IP	Transmission Control Protocol/Internet Protocol
TDR	Time Domain Reflectometry
TFTP	Trivial File Transfer Protocol
TIA	Telecommunications Industry Association
TopN	Utility that allows the user to analyze port traffic by reports
ToS	type of service
TLV	type-length-value
TTL	Time To Live
TVX	valid transmission
UDE	unidirectional Ethernet
UDL	unidirectional link
UDLD	UniDirectional Link Detection Protocol
UDLR	UniDirectional Link Routing
UDP	User Datagram Protocol
UNI	User-Network Interface
uRPF	unicast reverse path forwarding

**Table A-1 List of Acronyms (continued)**

<b>Acronym</b>	<b>Expansion</b>
UTC	Coordinated Universal Time
VACL	VLAN access control list
VCC	virtual channel circuit
VCI	virtual circuit identifier
VCR	Virtual Configuration Register
VFI	virtual forwarding instance
VINES	Virtual Network System
VLAN	virtual LAN
VMPS	VLAN Membership Policy Server
VMR	value mask result
VPLS	Virtual Private LAN Service
VPN	virtual private network
VRF	VPN routing and forwarding
VTP	VLAN Trunking Protocol
VVID	voice VLAN ID
WAN	wide area network
WCCP	Web Cache Coprocessor Protocol
WFQ	weighted fair queueing
WLSM	Wireless LAN Services Module
WRED	weighted random early detection
WRR	weighted round-robin
XCM	external column memory
XNS	Xerox Network System