

# List of Acronyms

AA	Authoritative Answer
AAAA	IPv6 DNS record
ABR	Area Border Router
ACD	Automatic Call Distribution
ACELP	Algebraic-Code-Excited Linear Prediction
ACK	Acknowledgment
AD	Active Directory
ADPCM	Adaptive Differential Pulse Code Modulation
ADSL	Asymmetric Digital Subscriber Loop
AF	Address Family
AFI	Address Family Identifier (RIP);Authority and Format Identifier (IS-IS)
AfriNIC	African Network Information Center
AH	Authentication Header
AIX	Advanced Interactive Executive (IBM's Unix)
AMI	Alternate Mark Inversion
ANS	Advanced Network Service
ANSI	American National Standards Institute
AOL	America On-Line
API	Application Program Interface
APNIC	Asian Pacific Network Information Center
APPC	Advanced Program-to-Program Communications
APPN	Advanced Peer-to-Peer Networking
ARIN	American Registry for Internet Numbers
ARP	Address Resolution Protocol
ARPA	Advanced Research Projects Agency
AS	Autonomous System
ASBR	Autonomous System Boundary Router
ASCII	American Standard Code for Information Interchange (IA-5)
ASIC	Application Specific Integrated Circuit
ASM	Any Source Multicast
ASN.1	Abstract Syntax Notation 1
ASP	Active Server Page
AT	Advanced Technology
ATM	Asynchronous Transfer Mode
ATT	Attach segment
AUI	Attachment Unit Interface
AUP	Acceptable Use Policy
AUX	Auxiliary
BBN	Bolt, Baranek, and Newman, Inc.
BBS	Bulletin Board System
BDR	Backup Designated Router
BECN	Backward Explicit Congestion Notification
BER	Bit Error Rate
BGP	Border Gateway Protocol
BIND	Berkeley Internet Name Domain
BIOS	Basic Input/Output System
B-ISDN	Broadband Integrated Services Digital Network
BITNET	Because It's Time Network

BITS	Bump in the Stack
BITW	Bump in the Wire
BOOTP	Bootstrap Protocol
BPSK	Binary Phase Shift Keying
BRI	Basic Rate Interface
BSD	Berkeley Systems (or Software) Distribution
CA	Certificate Authority
CABS	Carrier Access Billing System
CAR	Committed Access Rate
CAS	Channel Associated Signaling
CBC	Cipher Block Chaining
CBGP	Confederation Border Gateway Protocol
CBT	Core-Based Tree
CCITT	Consultative Committee on International Telegraphy and Telephony (French original)
CCS	Common Channel Signaling
CD	Call Disconnect; Collision Detection
CDMA	Code Division Multiple Access
CDR	Call Detail Record
CE	Customer Edge
CED	Called Station Identification
CELP	Code Excited Linear Prediction
CERN	European Council for Nuclear Research
CGI	Common Gateway Interface
CHAP	Challenge Handshake Authentication Protocol
CIA	Central Intelligence Agency
CIDR	Classless Interdomain Routing
CIP	Connector Interface Panel
CIR	Committed Information Rate
CIX	Commercial Internet Exchange
CLEC	Competitive Local Exchange Carrier
CLI	Command Line Interface
CLNP	Connectionless Network Protocol
CLNS	Connectionless Network Service
CLP	Cell Loss Priority
CLV	Code/Length/Value
CMIP	Common Management Information Protocol
CMIS	Common Management Information Services
CMOT	Common Management Information Services and Protocol Over TCP/IP
CNAME	Canonical Name
CNG	Calling Number
CO	Central Office
CoS	Class of Service
CPU	Central Processing Unit
CRC	Cyclical Redundancy Check
CRL	Certificate Revocation List
CRM	Customer Relationship Management
CS	Call Status
CSLIP	Compressed Serial Line Interface Protocol
CSMA	Carrier Sense Multiple Access
CSNP	Complete Sequence Number PDU
CSR	Certificate Signing Request

CSRC	Contributing Source Identifier
CSU	Channel Service Unit
CTI	Computer Telephony Integration
DAM	Diagnostic Acceptability Measure
DARPA	Defense Advanced Research Project Agency
DC	Direct Current; Demand Circuit
DCA	Defense Communication Agency
DCE	Data Circuit-terminating Equipment; Distributed Computing Environment
DD	Database Description
DDDS	Dynamic Delegation Discovery System
DDN	Defense Data Network
DE	Discard Eligible
DES	Data Encryption Standard
DF	Don't Fragment
DHAAD	Dynamic Home Agent Address Discovery
DHCP	Dynamic Host Configuration Protocol
DIS	Designated Intermediate System
DNA	Digital Network Architecture
DIX	Digital, Intel, and Xerox Ethernet
DLCI	Data Link Connection Identifier
DLL	Dynamic Link Library
DLP	Data Link Protocol
DM	Delta Modulation
DM	Dense Mode
DME	Distributed Management Environment
DMZ	Demilitarized Zone
DNS	Domain Name System
DNSSEC	Domain Name System Security
DoD	Department of Defense
DOS	Disk Operating System
DPCM	Differential Pulse Code Modulation
DR	Designated Router
DRAM	Dynamic Random Access Memory
DRT	Diagnostic Rhyme Test
DS	Digital Signal
DSAP	Destination Service Access Point
DSL	Digital Subscriber Line
DSP	Digital Signal Processor
DSU	Digital Service Unit
DTE	Data Terminal Equipment
DTMF	Dual Tone Multifrequency
DVMRP	Distance Vector Multicast Routing Protocol
DWDM	Dense Wavelength Division Multiplexing
EA	External Attributes; Extended Address
EBGP	External Border Gateway Protocol
ECC	Error Correction Code
ECM	Error Correction Mode
ECN	Explicit Congestion Notification
EGP	Exterior Gateway Protocol
EIGRP	Enhanced Interior Gateway Routing Protocol
EIR	Excess Information Rate

EoF	End of File
EoR	End of Record
ES	End System
ESMTP	Extensions to Simple Mail Transfer Protocol
ESF	Extended Superframe Format
ESP	Encapsulating Security Payload
EUI	Extended Unique Identifier
EXEC	Executive (mode)
FA	Foreign Agent
FAQ	Frequently Asked Questions
FCC	Federal Communication Commission
FCS	Frame Check Sequence
FDDI	Fiber Distributed Data Interface
FDM	Frequency Division Multiplexing
FE	Fast Ethernet
FEB	Forwarding Engine Board
FEC	Forward Error Correction, Fast EtherChannel
FECN	Forward Explicit Congestion Notification
FEIP	Fast Ethernet Interface Processor
FIN	Final segment
FIX	Federal Internet Exchange
FM	Frequency Modulation
FPC	Flexible PIC Concentrator
FQDN	Fully Qualified Domain Name
FRAD	Frame Relay Access Device
FT	Forwarding Table
FTAM	File Transfer, Access, and Management
FTP	File Transfer Protocol
GBE	Gigabit Ethernet
GE	Gigabit Ethernet
GEO	Geosynchronous Earth Orbit
GFC	Generic Flow Control
GGP	Gateway-to-Gateway Protocol
GIF	Graphics Interchange Format
GIP	Gateway Interface Protocol
GLP	Gateway Location Protocol
GPS	Global Positioning System
GRE	Generic Routing Encapsulation
GSM	Global System for Mobile
GSTN	Global Switched Telephone Network
GTLD	Generic Top Level Domain
GUI	Graphical User Interface
HA	Home Agent
HDLC	High-Level Datalink Control
HEC	Header Error Control
HF	High Frequency
HMAC	Hashed Message Authentication Check
HTML	Hypertext Markup Language
HTTP	Hypertext Transfer Protocol
IA	Implementation Agreement; International Alphabet (ASCII is IA.5); Inter-Area
IAB	Internet Activities Board; Internet Architecture Board

IANA	Internet Assigned Numbers Authority
ICANN	Internet Corporation for Assigned Names and Numbers
ICMP	Internet Control Message Protocol
ICV	Integrity Check Value
ID	Identifier
IDNS	Internationalization of the Domain Name Space
IDRP	Inter-domain Routing Protocol
IEEE	Institute of Electrical and Electronics Engineers
IEN	Internet Engineering Notes
IESG	Internet Engineering Steering Group
IETF	Internet Engineering Task Force
IGMP	Internet Group Management Protocol
IGP	Interior Gateway Protocol
IGRP	Interior Gateway Routing Protocol
IKE	Internet Key Exchange
ILEC	Incumbent Local Exchange Carrier
IMAP	Internet Mail Access Program
IMP	Interface Message Processor
IN	Intelligent Network
InARP	Inverse Address Resolution Protocol
IOS	Internetwork Operating System
IP	Internet Protocol
IPLS	IP-only LAN-like Service
IPSec	IP Security
IRC	Internet Relay Chat
IRR	Internet Routing Registry
IRTF	Internet Research Task Force
IS	Information Systems
ISAKMP	Internet Security Association and Key Management Protocol
ISATAP	Intra-site Automatic Tunnel Addressing Protocol
ISBN	International Standard Book Number
ISDN	Integrated Services Digital Network
IS-IS	Intermediate System to Intermediate System
ISN	Initial Sequence Number
ISO	International Organization for Standardization (ISO means “equal”)
ISP	Internet Service Provider
IT	Information Technology
ITU	International Telecommunication Union
ITSP	Internet Telephony Service Provider
ITU	International Telecommunications Union
IVR	Interactive Voice Response
JPEG	Joint Photographic Experts’ Group
KB	Kilobyte
L2F	Layer 2 Forwarding
L2TP	Layer 2 Tunneling Protocol
LAC	L2TP Access Concentrator
LAN	Local Area Network
LAPB	Link Access Procedure Balanced
LAPD	Link Access Procedure on the D-channel
LATA	Local Access and Transport Area
LCD	Liquid Crystal Diode

LCP	Link Control Protocol
LDAP	Lightweight Directory Access Protocol
LDP	Label Distribution Protocol
LEC	Local Exchange Carrier
LLC	Logical Link Control
LNS	L2TP Network Server
LOC	Location
LPC	Linear Predictive Coding
LS	Link State
LSA	Link State Advertisement
LSB	Least Significant Bit (Byte)
LSP	Label Switched Path; Link State PDU
MAC	Media Access Control
MAN	Metropolitan Area Network
MAU	Media Access Unit
MB	Megabytes
MBGP	Multiprotocol Border Gateway Protocol
MBONE	Multicast Backbone
MC	Multipoint Controller; Multicast
MCS	Miscellaneous Control System
MCU	Multipoint Control Unit
MD5	Message Digest 5
MED	Multi-Exit Discriminator
MF	More Fragments
MGCP	Multimedia Gateway Control Protocol
MIB	Management Information Base
MIME	Multipurpose Internet Mail Extensions
M-ISIS	Multicast IS-IS
MLD	Multicast Listener Discovery
MN	Mobile Node
MOSPF	Multicast OSPF
MP-BGP	Multiprotocol BGP (sometimes)
MPLS	Multiprotocol Label Switching
MSDP	Multicast Source Discovery Protocol
MSS	Maximum Segment Size
MTA	Mail Transfer Agent
MTU	Maximum Transmission Unit
MUA	Mail User Agent
MX	Mail Exchange
NAP	Network Access Point
NAPT	Network Address Port Translation
NAT	Network Address Translation
NBMA	Non-Broadcast, Multi-Access
NCP	Network Control Protocol
NCSA	National Center for Supercomputing Applications
ND	Neighbor Discovery
NDP	Neighbor Discovery Protocol
NET	Network Entity Title
NFS	Network File System
NIC	Network Interface Card/Network Information Center
NID	Network Intrusion Detection

NLA	Next Level Aggregator
NLRI	Network Layer Reachability Information
NOC	Network Operations Center
NSAP	Network Service Attachment Point
NSF	National Science Foundation
NSP	Network Service Provider
NSSA	Not-So-Stubby-Area
NVRAM	Non-Volatile Random Access Memory
NVT	Network Virtual Terminal
OACK	Option Acknowledgment
OAM&P	Operations, Administration, Maintenance & Provisioning
OC	Optical Carrier
OFDM	Orthogonal Frequency Division Multiplexing
OL	OverLoad
ONC	Open Network Computing
OSI	Open Systems Interconnection
OSI-RM	Open Systems Interconnection Reference Model
OSPF	Open Shortest Path First
OUI	Organizationally Unique Identifier
P	Provider
PAC	PPTP Access Concentrator
PARC	Palo Alto Research Center
PAT	Port Address Translation
PC	Personal Computer
PCG	PFE Clock Generator
PCI	Peripheral Component Interconnect
PCM	Pulse Code Modulation
PD	Packet Director
PDA	Personal Digital Assistant
PDU	Protocol Data Unit
PE	Provider Edge
PFE	Packet Forwarding Engine
PGM	Pretty Good Multicast
PHP	Penultimate Hop Popping
PIC	Physical Interface Card
PIM	Protocol Independent Multicast
PKI	Public Key Infrastructure
PLCP	Physical Layer Convergence Protocol
PLP	Packet Layer Protocol
PNS	PPTP Network Server
POP	Point of Presence/Post Office Protocol
POS	Packet over SONET/SDH
PPDU	Physical Protocol Data Unit
PPP	Point-to-Point Protocol
PPPoE	PPP over Ethernet
PPTP	Point-to-Point Tunneling Protocol
PSDU	Physical Layer Service Data Unit
PSH	Push
PSNP	Partial Sequence Number PDU
PSTN	Public Switched Telephone Network
PTI	Payload Type Indicator

PTR	Pointer
PW	Pseudo-Wire
QoS	Quality of Service
QR	Query Response
RA	Routing Arbiter/Recursion Available (DNS)
RADIUS	Remote Access Dial-In User Service
RAM	Random Access Memory
RARP	Reverse Address Resolution Protocol
RAS	Registration, Admission, and Status
RD	Recursion Desired
RE	Routing Engine or Regular Expression
RFC	Request for Comment
RIB	Routing Information Base
RIP	Routing Information Protocol
RIPE NCC	Reséaux IP Européens Network Coordination Center
RISC	Reduced Instruction Set Computing
ROMMON	Read-Only Memory Monitor
RMON	Remote Monitor
RP	Rendezvous Point (PIM)/Responsible Person (DNS)
RPC	Remote Procedure Call
RPF	Reverse Oath Forwarding
RPT	Rendezvous Point Tree
RQ	Request
RR	Route Reflector (BGP)/Resource Records (DNS)
RRQ	Read Request
RST	Reset
RSVP	Resource Reservation Protocol
RT	Routing Table
RTCP	Real-Time Control Protocol
RTMP	Routing Table Maintenance Protocol
RTP	Real-time Protocol or Reliable Transport Protocol (Cisco)
RTT	Round Trip Time
SA	Security Association
SAP	Service Access Point/Session Announcement Protocol
SASL	Simple Authentication and Security Layer
SCB	System Control Board (M40)
scp	secure copy
SDH	Synchronous Digital Hierarchy
SDK	Software Development Kit
SDLC	Synchronous Data Link Control
SDP	Session Description Protocol
SDU	Service Data Unit
SFM	Switching and Forwarding Module (M160)
SFTP	Secure File Transfer Protocol
SGML	Standard Generalized Markup Language
SHA	Secure Hash Algorithm
SIG	Signature
SIP	Session Initiation Protocol
SKA	Sender Keeps All
SKIP	Simple Key Management for Internet Protocols
SLIP	Serial Line Interface Protocol



SM	Sparse Mode
SMDS	Switched Multimegabit Data Services
SMI	Structure of Management Information
S/MIME	Multipurpose Internet Mail Extensions Security
SMTP	Simple Mail Transfer Protocol
SNA	Systems Network Architecture
SNAP	Sub-Network Access Protocol
SNMP	Simple Network Management Protocol
SNP	Sequence Number PDU
SNPA	Subnetwork Point of Attachment
SOHO	Small Office/Home Office
SONET	Synchronous Optical Network
SPF	Shortest Path First
SPI	Security Parameter Index
SPT	Shortest Path tree
SRV	Services
SS7	Signaling System 7
SSAP	Source Service Access Point
SSB	System Switching Board (M20)
SSH	Secure Shell
SSM	Source-Specific Multicast
SSRC	Synchronization Source Identifier
STP	Signaling Transfer Point
SYN	Synchronize
TACACS+	Terminal Access Controller Access Control Systems Plus
TC	Truncated
TCP	Transmission Control Protocol
TE	Traffic Engineering
TFTP	Trivial File Transfer Protocol
TGZ	tar and gzip
TLA	Top Level Aggregator
TLI	Transport Layer Interface
TLV	Type/Length/Value
TLS	Transparent LAN Service
ToS	Type of Service
TTL	Time To Live
TTY	Teletype
TXT	Text
UA	User Agent
UAC	User Agent Client
UAS	User Agent Server
UDP	User Datagram Protocol
UI	Unnumbered Information
UIUC	University of Illinois Urbana/Champaign
URG	Urgent
URI	Uniform Resource Identifier
URL	Universal (or Uniform) Resource Locator
URN	Uniform Resource Name
UTP	Unshielded Twisted Pair
VCI	Virtual Channel Identifier
VLAN	Virtual Local Area Network

VLSM	Variable-Length Subnet Masking
VoIP	Voice over IP
VPI	Virtual Path Identifier
VPLS	Virtual Private LAN Service
VPN	Virtual Private Network
VPSN	Virtual Private Switched Network
VPWS	Virtual Private Wire Service
VRF	Virtual Routing and Forwarding table
VTY	Virtual Teletype
WAN	Wide Area Network
WEP	Wired Equivalent Privacy
WiFi	Wireless Fiber/Wireless Fidelity
WRQ	Write Request
XDR	External Data Representation
XML	eXtensible Markup Language