

Standards Supported in Cisco IOS Software Releases 12.4 and 12.2S

PB2239

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This Product Bulletin lists the major industry standards supported by Cisco IOS® Software Releases 12.4 and 12.2S.

Given the evolving nature of standardization, this document may not reflect specific drafts, revisions of particular standards, or all the standards that are supported in Cisco IOS Software beyond this document's publication date.

Questions of this nature regarding standards not shown below should be directed to the appropriate Cisco IOS Software Product Manager:

<http://www.cisco.com/warp/public/732/feedback/release/>

Additional Information

- Cisco IOS Software
<http://www.cisco.com/go/ios/>
- IETF RFC Index
http://www.ietf.org/iesg/1/rfc_index.txt

Internet Engineering Task Force (IETF) Requests for Comments (RFCs)

Table 1. IETF RFCs supported in Cisco IOS Software Releases 12.4 and 12.2S

RFC Number	RFC Remarks	RFC Title	Cisco Supports? (Yes/No/Partial/Not Applicable/Obsoleted or Updated by RFC Cisco IOS Supports)
4724		Graceful Restart Mechanism for BGP	Yes
4364	(Obsoletes RFC2547)	BGP/MPLS IP Virtual Private Networks (VPNs)	Yes
4031		Service requirements for Layer 3 Provider Provisioned Virtual Private Networks (VPNs)	Yes
4026		Provider Provisioned VPN terminology	Yes
4023		Encapsulating MPLS in IP or Generic Routing Encapsulation (GRE)	Partial—GRE Only
4008		Definitions of Managed Objects for Network Address Translators (NAT)	Partial
4007		IPv6 Scoped Address Architecture	Yes
3993		Subscriber-ID Suboption for the Dynamic Host Configuration Protocol (DHCP) Relay Agent Option	Yes
3988		Maximum Transmission Unit Signaling Extensions for the Label Distribution Protocol (LDP)	Yes
3985		PWE3 (Pseudo-Wire Emulation Edge-to-Edge) Architecture	Yes
3963		Network Mobility (NEMO) Basic Support Protocol	Partial

RFC Number	RFC Remarks	RFC Title	Cisco Supports? (Yes/No/Partial/Not Applicable/Obsoleted or Updated by RFC Cisco IOS Supports)
3956	(Updates RFC3306)	Embedding the Rendezvous Point (RP) Address in an IPv6 Multicast Address	Yes
3954		Cisco Systems NetFlow Services Export Version 9	Yes
3946		Generalized Multi-Protocol Label Switching (GMPLS) Extensions for Synchronous Optical Network (SONET) and Synchronous Digital Hierarchy (SDH) Control	Yes
3945		Generalized Multi-Protocol Label Switching (GMPLS) Architecture	Yes
3942	(Updates RFC2132)	Reclassifying Dynamic Host Configuration Protocol version 4 (DHCPv4) Options	Partial—we are supporting it, we have documented usages
3917		Requirements for IP Flow Information Export (IPFIX)	Yes
3916		Requirements for Pseudo-Wire Emulation Edge-to-Edge (PWE3)	Yes
3910		The SPIRITS (Services in PSTN requesting Internet Services) Protocol	Yes
3847		Restart Signaling for Intermediate System to Intermediate System (IS-IS)	Yes
3826		The Advanced Encryption Standard (AES) Cipher Algorithm in the SNMP User-based Security Model	Yes
3815		Definitions of Managed Objects for the Multiprotocol Label Switching (MPLS), Label Distribution Protocol (LDP)	Yes
3814		Multiprotocol Label Switching (MPLS) Forwarding Equivalence Class To Next Hop Label Forwarding Entry (FEC-To-NHLFE) Management Information Base (MIB)	Yes
3813		Multiprotocol Label Switching (MPLS) Label Switching Router (LSR) Management Information Base (MIB)	Yes
3812		Multiprotocol Label Switching (MPLS) Traffic Engineering (TE) Management Information Base (MIB)	Yes
3811		Definitions of Textual Conventions (TCs) for Multiprotocol Label Switching (MPLS) Management	Yes
3810	(Updates RFC2710)	Multicast Listener Discovery Version 2 (MLDv2) for IPv6	Yes
3809		Generic Requirements for Provider Provisioned Virtual Private Networks (VPNs)	Yes
3787		Recommendations for Interoperable IP Networks using Intermediate System to Intermediate System (IS-IS).	Yes
3784		IS-IS extensions for Traffic Engineering (TE)	Yes
3775		Mobility Support in IPv6	Partial (no IPsec authentication, no multicast)
3768	(Obsoletes RFC2338)	Virtual Router Redundancy Protocol (VRRP)	Yes
3758		Stream Control Transmission Protocol (SCTP) Partial Reliability Extension	Yes
3749		Transport Layer Security Protocol Compression Methods	Yes
3737		IANA Guidelines for the Registry of Remote Monitoring (RMON) MIB (Management Information Base) modules	Yes
3736		Stateless Dynamic Host Configuration Protocol (DHCP) Service for IPv6	Yes
3719		Recommendations for Interoperable Networks using Intermediate System to Intermediate System (IS-IS)	Yes
3697		IPv6 Flow Label Specification	Yes
3670		Information Model for Describing Network Device QoS (Quality of Service) Datapath Mechanisms	Yes

RFC Number	RFC Remarks	RFC Title	Cisco Supports? (Yes/No/Partial/Not Applicable/Obsoleted or Updated by RFC Cisco IOS Supports)
3666		Session Initiation Protocol (SIP) Public Switched Telephone Network (PSTN) Call Flows	Yes (supports all call flows mentioned with exception that PSTN signaling is ISDN and not ISUP. On SIP leg, call flows are supported)
3646		DNS Configuration options for Dynamic Host Configuration Protocol for IPv6 (DHCPv6)	Yes
3644		Policy Quality of Service (QoS) Information Model	Yes
3633		IPv6 Prefix Options for Dynamic Host Configuration Protocol (DHCP) version 6	Yes
3630	(Updates RFC2370)	Traffic Engineering (TE) Extensions to OSPF Version 2	Yes
3623		Graceful OSPF Restart	Yes
3612		Applicability Statement for Restart Mechanisms for the Label Distribution Protocol (LDP)	Yes
3609		Tracing Requirements for Generic Tunnels	Partial
3596	(Obsoletes RFC3152, RFC1886)	DNS Extensions to Support IP Version 6 (IPv6)	Yes
3590	(Updates RFC2710)	Source Address Selection for the Multicast Listener Discovery (MLD) Protocol	Yes
3587	(Obsoletes RFC2374)	IPv6 Global Unicast Address Format	Yes
3546	(Updates RFC2246)	Transport Layer Security (TLS) Extensions	Yes
3527		Link Selection sub-option for the Relay Agent Information Option for DHCPv4	Yes
3519		Mobile IP Traversal of Network Address Translation (NAT) Devices	Yes
3513	(Obsoletes RFC2373)	Internet Protocol Version 6 (IPv6) Addressing Architecture	Yes
3495		Dynamic Host Configuration Protocol (DHCP) Option for CableLabs Client Configuration	Partial (on server via generic option configuration)
3484		Default Address Selection for Internet Protocol version 6 (IPv6)	Yes
3478		Graceful Restart Mechanism for Label Distribution Protocol (LDP)	Yes
3477		Signaling Unnumbered Links in Resource Reservation Protocol—Traffic Engineering (RSVP-TE)	Yes
3473	(Updated by RFC4003)	Generalized Multi-Protocol Label Switching (GMPLS) Signaling Resource Reservation Protocol-Traffic Engineering (RSVP-TE) Extensions	Yes
3471		Generalized Multi-Protocol Label Switching (GMPLS) Signaling Functional Description	Yes
3469		Framework for MPLS-based Recovery	Yes
3443	(Updates RFC3032)	Time To Live (TTL) Processing in Multi-Protocol Label Switching (MPLS) Networks	Partial
3435	(Updated by RFC3661)	Media Gateway Control Protocol (MGCP)	Yes
3418	(Obsoletes RFC1907)	Management Information Base (MIB) for the Simple Network Management Protocol (SNMP)	Yes
3416	(Obsoletes RFC1905)	Version 2 of the Protocol Operations for the Simple Network Management Protocol (SNMP).	Yes
3376	(Obsoletes RFC2236)	Internet Group Management Protocol (IGMP), Version 3	Yes
3353		Framework for IP Multicast in MPLS	Yes

RFC Number	RFC Remarks	RFC Title	Cisco Supports? (Yes/No/Partial/Not Applicable/Obsoleted or Updated by RFC Cisco IOS Supports)
3344	(Obsoletes RFC3220)	IP Mobility Support for IPv4	Yes
3319		Dynamic Host Configuration Protocol (DHCPv6) Options for Session Initiation Protocol (SIP) Servers	Yes
3315		Dynamic Host Configuration Protocol for IPv6 (DHCPv6)	Yes
3309	(Updates RFC2960)	Stream Control Transmission Protocol (SCTP) Checksum Change	Yes
3306	(Updated by RFC3956)	Unicast-Prefix-based IPv6 Multicast Addresses	Obsoleted or Updated by RFC Cisco IOS Supports
3288		Using the Simple Object Access Protocol (SOAP) in Blocks Extensible Exchange Protocol (BEEP)	Yes
3272		Overview and Principles of Internet Traffic Engineering (TE)	Yes
3270		Multi-Protocol Label Switching (MPLS) Support of Differentiated Services (Diffserv)	Yes
3268		Advanced Encryption Standard (AES) Ciphersuites for Transport Layer Security (TLS).	Yes
3261	(Obsoletes RFC2543) (Updated by RFC3265, RFC3853)	SIP: Session Initiation Protocol	Yes
3260	(Updates RFC2474, RFC2475, RFC2597)	New Terminology and Clarifications for Diffserv (Differentiated Services)	Yes
3246	(Obsoletes RFC2598)	An Expedited Forwarding (EF) PHB (Per-Hop Behavior)	Yes
3220	(Obsoletes RFC2002) (Obsoleted by RFC3344)	IP Mobility Support for IPv4	Yes
3215		LDP (Label Distribution Protocol) State Machine	Yes
3210		Applicability Statement for Extensions to RSVP (Resource Reservation Protocol) for LSP (Label Switched Path)—Tunnels	Yes
3209	(Updated by RFC3936)	RSVP-TE (Resource Reservation Protocol—Traffic Engineering): Extensions to RSVP for LSP (Label Switched Path) Tunnels	Yes
3180	(Obsoletes RFC2770)	GLOP Addressing in 233/8	Yes
3168	(Obsoletes RFC2481) (Updates RFC2474, RFC2401, RFC0793)	The Addition of Explicit Congestion Notification (ECN) to IP	Yes
3162		RADIUS and IPv6	Yes
3152	(Obsoleted by RFC3596) (Updates RFC2874, RFC2772, RFC2766, RFC2553, RFC1886) (Also BCP0049)	Delegation of IP6.ARPA (IPv6 Address and Routing Parameters Area)	Yes
3147		Generic Routing Encapsulation (GRE) over CLNS Networks	Yes
3115	(Obsoletes RFC3025)	Mobile IP Vendor/Organization-Specific Extensions	Yes
3107		Carrying Label Information in BGP-4	Yes

RFC Number	RFC Remarks	RFC Title	Cisco Supports? (Yes/No/Partial/Not Applicable/Obsoleted or Updated by RFC Cisco IOS Supports)
3101	(Obsoletes RFC1587)	The OSPF Not-So-Stubby Area (NSSA) Option	Yes
3097	(Updates RFC2747)	RSVP (Resource Reservation Protocol) Cryptographic Authentication—Updated Message Type Value	Yes
3081		Mapping the BEEP (Blocks Extensible Exchange Protocol) Core onto TCP	Yes
3080		The Blocks Extensible Exchange Protocol (BEEP) Core	Yes
3068		An Anycast Prefix for 6to4 Relay Routers	Yes
3065	(Obsoletes RFC1965)	Autonomous System Confederations for BGP	Yes
3057	(Updated by RFC3807)	ISDN Q.921-User Adaptation Layer	Yes
3056		Connection of IPv6 Domains via IPv4 Clouds	Yes
3046		DHCP Relay Agent Information Option	Yes
3038		VCID Notification over ATM link for LDP (Label Distribution Protocol)	Yes
3037		LDP (Label Distribution Protocol) Applicability	Yes
3036		LDP (Label Distribution Protocol) Specification	Yes
3035		MPLS using LDP (Label Distribution Protocol) and ATM VC Switching	Yes
3032	(Updated by RFC3443)	MPLS Label Stack Encoding	Yes
3031		Multiprotocol Label Switching (MPLS) Architecture	Yes
3025	(Obsoleted by RFC3115)	Mobile IP Vendor/Organization-Specific Extensions	Yes
3024	(Obsoletes RFC2344)	Reverse Tunneling for Mobile IP, revised	Yes
3022	(Obsoletes RFC1631)	Traditional IP Network Address Translator (Traditional NAT)	Yes
3012		Mobile IPv4 Challenge/Response Extensions	Yes
2961		RSVP (Resource Reservation Protocol) Refresh Overhead Reduction Extensions	Yes
2960	(Updated by RFC3309)	Stream Control Transmission Protocol (SCTP)	Yes
2918		Route Refresh Capability for BGP-4	Yes
2915	(Obsoleted by RFC3401, RFC3402, RFC3403, RFC3404)	The Naming Authority Pointer (NAPTR) DNS Resource Record	Yes
2893	(Obsoletes RFC1933)	Transition Mechanisms for IPv6 Hosts and Routers	Yes
2878	(Obsoletes RFC1638) (Obsoleted by RFC3518)	PPP Bridging Control Protocol (BCP)	Yes
2874	(Updates RFC1886) (Updated by RFC3152, RFC3226, RFC3363, RFC3364)	DNS Extensions to Support IPv6 Address Aggregation and Renumbering	Obsoleted or Updated by RFC Cisco IOS Supports
2865	(Updated by RFC2868, RFC3575)	Remote Authentication Dial In User Service (RADIUS)	Yes

RFC Number	RFC Remarks	RFC Title	Cisco Supports? (Yes/No/Partial/Not Applicable/Obsoleted or Updated by RFC Cisco IOS Supports)
2858	(Obsoletes RFC2283)	Multiprotocol Extensions for BGP-4	Yes
2842	(Obsoleted by RFC3392)	Capabilities Advertisement with BGP-4	Yes
2833		RTP (Real-Time Protocol) Payload for DTMF Digits, Telephony Tones and Telephony Signals	Yes
2818		HTTP Over TLS	Yes
2817	(Updates RFC2616)	Upgrading to TLS Within HTTP/1.1	Yes
2796	(Updates RFC1966)	BGP Route Reflection—An Alternative to Full Mesh IBGP	Yes
2794	(Updates RFC2290)	Mobile IP Network Access Identifier Extension for IPv4	Yes
2787		Definitions of Managed Objects for the Virtual Router Redundancy Protocol (VRRP)	Yes
2782	(Obsoletes RFC2052)	A DNS RR (DNS Resource Record) for specifying the location of services (DNS SRV) Domain Name System Server	Yes
2772	(Obsoletes RFC2546) (Updated by RFC3152)	6Bone Backbone Routing Guidelines	Obsoleted or Updated by RFC Cisco IOS Supports
2770	(Obsoleted by RFC3180)	GLOP Addressing in 233/8	Obsoleted or Updated by RFC Cisco IOS Supports
2766	(Updated by RFC3152)	Network Address Translation—Protocol Translation (NAT-PT)	Yes
2765		Stateless IP/ICMP Translation Algorithm (SIIT)	Yes
2750	(Updates RFC2205)	RSVP (Resource Reservation Protocol) Extensions for Policy Control	Yes
2749		COPS usage for RSVP (Resource Reservation Protocol)	Yes
2747	(Updated by RFC3097)	RSVP (Resource Reservation Protocol) Cryptographic Authentication	Yes
2745		RSVP (Resource Reservation Protocol) Diagnostic Messages	Yes
2740		OSPF for IPv6	Yes
2737	(Obsoletes RFC2037)	Entity MIB (Management Information Base) (Version 2)	Yes
2712		Addition of Kerberos Cipher Suites to Transport Layer Security (TLS)	Yes
2710	(Updated by RFC3590, RFC3810)	Multicast Listener Discovery (MLD) for IPv6	Yes
2705	(Obsoleted by RFC3435) (Updated by RFC3660)	Media Gateway Control Protocol (MGCP) Version 1.0	Yes
2702		Requirements for Traffic Engineering (TE) Over MPLS	Yes
2698		A Two Rate Three Color Marker	Yes
2697		A Single Rate Three Color Marker	Yes
2686		The Multi-Class Extension to Multi-Link PPP	Yes
2684	(Obsoletes RFC1483)	Multiprotocol Encapsulation over ATM Adaptation Layer 5	Yes
2665	(Obsoletes RFC2358) (Obsoleted by RFC3635)	Definitions of Managed Objects for the Ethernet-like Interface Types	Yes
2661		Layer Two Tunneling Protocol "L2TP"	Yes

RFC Number	RFC Remarks	RFC Title	Cisco Supports? (Yes/No/Partial/Not Applicable/Obsoleted or Updated by RFC Cisco IOS Supports)
2617	(Obsoletes RFC2069)	HTTP Authentication: Basic and Digest Access Authentication	Yes
2616	(Obsoletes RFC2068) (Updated by RFC2817)	Hypertext Transfer Protocol—HTTP/1.1	Yes
2598	(Obsoleted by RFC3246)	An Expedited Forwarding (EF) PHB (Per-Hop Behavior)	Yes
2597	(Updated by RFC3260)	Assured Forwarding PHB (Per-Hop Behavior) Group	Yes
2590		Transmission of IPv6 Packets over Frame Relay Networks Specification	Yes
2580	(Obsoletes RFC1904)	Conformance Statements for SMIPv2 (Structure of Management Information version 2)	Yes
2575	(Obsoletes RFC2275) (Obsoleted by RFC3415)	View-based Access Control Model (VACM) for the Simple Network Management Protocol (SNMP)	Yes
2574	(Obsoletes RFC2274) (Obsoleted by RFC3414)	User-based Security Model (USM) for version 3 of the Simple Network Management Protocol (SNMPv3).	Yes
2573	(Obsoletes RFC2273) (Obsoleted by RFC3413)	SNMP Applications	Yes
2572	(Obsoletes RFC2272) (Obsoleted by RFC3412)	Message Processing and Dispatching for the Simple Network Management Protocol (SNMP)	Yes
2571	(Obsoletes RFC2271) (Obsoleted by RFC3411)	An Architecture for Describing SNMP Management Frameworks	Yes
2560		X.509 Internet Public Key Infrastructure (PKI) Online Certificate Status Protocol—OCSP	Yes
2553	(Obsoletes RFC2133) (Obsoleted by RFC3493) (Updated by RFC3152)	Basic Socket Interface Extensions for IPv6	Obsoleted or Updated by RFC Cisco IOS Supports
2547	(Obsoleted by 4364)	BGP/MPLS VPNs	Yes
2545		Use of BGP-4 Multiprotocol Extensions for IPv6 Inter-Domain Routing	Yes
2543	(Obsoleted by RFC3261, RFC3262, RFC3263, RFC3264, RFC3265)	SIP: Session Initiation Protocol	Yes
2529		Transmission of IPv6 over IPv4 Domains without Explicit Tunnels	Yes
2509	(Obsoleted by RFC3544)	IP Header Compression over PPP	Yes
2508		Compressing IP/UDP/RTP Headers for Low-Speed Serial Links	Yes
2507		IP Header Compression	Yes
2492		IPv6 over ATM Networks	Yes
2481	(Obsoleted by RFC3168)	A Proposal to add Explicit Congestion Notification (ECN) to IP	Obsoleted or Updated by RFC Cisco IOS Supports

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2475	(Updated by RFC3260)	An Architecture for Differentiated Service	Yes
2474	(Obsoletes RFC1455, RFC1349) (Updated by RFC3168, RFC3260)	Definition of the Differentiated Services (Diffserv) Field (DS Field) in the IPv4 and IPv6 Headers	Yes
2473		Generic Packet Tunneling in IPv6 Specification	Yes
2472	(Obsoletes RFC2023)	IP Version 6 (IPv6) over PPP	Yes
2467	(Obsoletes RFC2019)	Transmission of IPv6 Packets over FDDI Networks	Yes
2464	(Obsoletes RFC1972)	Transmission of IPv6 Packets over Ethernet Networks	Yes
2463	(Obsoletes RFC1885)	Internet Control Message Protocol (ICMPv6) for the Internet Protocol Version 6 (IPv6) Specification	Yes
2462	(Obsoletes RFC1971)	IPv6 Stateless Address Autoconfiguration	Yes
2461	(Obsoletes RFC1970)	Neighbor Discovery for IP Version 6 (IPv6)	Yes
2460		Internet Protocol, Version 6 (IPv6) Specification	Yes
2453	(Obsoletes RFC1723)	RIP Version 2	Yes
2439		BGP Route Flap Damping	Yes
2433		Microsoft PPP CHAP (Challenge Handshake Authentication Protocol) Extensions	Yes
2427	(Obsoletes RFC1490, RFC1294)	Multiprotocol Interconnect over Frame Relay	Yes
2409		The Internet Key Exchange (IKE)	Yes
2408		Internet Security Association and Key Management Protocol (ISAKMP)	Yes
2407		The Internet IP Security Domain of Interpretation for ISAKMP	Yes
2406	(Obsoletes RFC1827)	IP Encapsulating Security Payload (ESP)	Yes
2402	(Obsoletes RFC1826)	IP Authentication Header	Yes
2401	(Obsoletes RFC1825) (Updated by RFC3168)	Security Architecture for the Internet Protocol (IP)	Yes
2393	(Obsoleted by RFC3173)	IP Payload Compression Protocol (IPComp)	Yes
2390	(Obsoletes RFC1293)	Inverse Address Resolution Protocol	Yes
2374	(Obsoletes RFC2073) (Obsoleted by RFC3587)	An IPv6 Aggregatable Global Unicast Address Format	Yes
2373	(Obsoletes RFC1884) (Obsoleted by RFC3513)	IP Version 6 (IPv6) Addressing Architecture	Yes
2370	(Updated by RFC3630) (Also RFC2328)	The OSPF Opaque LSA Option	Yes

RFC Number	RFC Remarks	RFC Title	Cisco Supports? (Yes/No/Partial/Not Applicable/Obsoleted or Updated by RFC Cisco IOS Supports)
2365		Administratively Scoped IP Multicast	Yes
2364		PPP over ATM AAL5 (Asynchronous Transfer Mode Adaptive Layer 5)	Yes
2362	(Obsoletes RFC2117)	Protocol Independent Multicast-Sparse Mode (PIM-SM): Protocol Specification	Yes
2358	(Obsoletes RFC1650) (Obsoleted by RFC2665)	Definitions of Managed Objects for the Ethernet-like Interface Types	Obsoleted or Updated by RFC Cisco IOS Supports
2344	(Obsoleted by RFC3024)	Reverse Tunneling for Mobile IP	Obsoleted or Updated by RFC Cisco IOS Supports
2341		Cisco Layer Two Forwarding (Protocol) "L2F"	Yes
2338	(Obsoleted by RFC3768)	Virtual Router Redundancy Protocol (VRRP)	Yes
2337		Intra-LIS (Intra-Logical IP Subnet) IP multicast among routers over ATM using Sparse Mode PIM (Protocol Independent Multicast)	Yes
2332		NBMA Next Hop Resolution Protocol (NHRP)	Yes
2328	(Obsoletes RFC2178)	OSPF Version 2	Yes
2327	(Updated by RFC3266)	SDP: Session Description Protocol	Yes
2326		Real Time Streaming Protocol (RTSP)	Yes
2290	(Updates RFC2002) (Updated by RFC2794)	Mobile-IPv4 Configuration Option for PPP IPCP (Internet Protocol Control Protocol)	Obsoleted or Updated by RFC Cisco IOS Supports
2284		PPP Extensible Authentication Protocol (EAP)	Yes
2283	(Obsoleted by RFC2858)	Multiprotocol Extensions for BGP-4	Yes
2281		Cisco Hot Standby Router Protocol (HSRP)	Yes
2275	(Obsoletes RFC2265) (Obsoleted by RFC2575)	View-based Access Control Model (VACM) for the Simple Network Management Protocol (SNMP)	Yes
2274	(Obsoletes RFC2264) (Obsoleted by RFC2574)	User-based Security Model (USM) for version 3 of the Simple Network Management Protocol (SNMPv3).	Yes
2273	(Obsoletes RFC2263) (Obsoleted by RFC2573)	SNMPv3 Applications	Yes
2272	(Obsoletes RFC2262) (Obsoleted by RFC2572)	Message Processing and Dispatching for the Simple Network Management Protocol (SNMP)	Yes
2271	(Obsoletes RFC2261) (Obsoleted by RFC2571)	An Architecture for Describing SNMP Management Frameworks	Yes
2265	(Obsoleted by RFC2275)	View-based Access Control Model (VACM) for the Simple Network Management Protocol (SNMP)	Obsoleted or Updated by RFC Cisco IOS Supports
2264	(Obsoleted by RFC2274)	User-based Security Model (USM) for version 3 of the Simple Network Management Protocol (SNMPv3).	Obsoleted or Updated by RFC Cisco IOS Supports
2263	(Obsoleted by RFC2273)	SNMPv3 Applications	Obsoleted or Updated by RFC Cisco IOS Supports
2262	(Obsoleted by RFC2272)	Message Processing and Dispatching for the Simple Network Management Protocol (SNMP)	Obsoleted or Updated by RFC Cisco IOS Supports

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2261	(Obsoleted by RFC2271)	An Architecture for Describing SNMP Management Frameworks	Obsoleted or Updated by RFC Cisco IOS Supports
2246	(Updated by RFC3546)	The TLS Protocol Version 1.0	Yes
2236	(Obsoleted by RFC3376) (Updates RFC1112)	Internet Group Management Protocol (IGMP), Version 2	Yes
2225	(Obsoletes RFC1626, RFC1577)	Classical IP and ARP (Address Resolution Protocol) over ATM	Yes
2222	(Updated by RFC2444)	Simple Authentication and Security Layer (SASL)	Yes
2216		Network Element Service Specification Template (RFC 2216)	Yes
2215		General Characterization Parameters for Integrated Service Network Elements	Yes
2211		Controlled load spec	Yes
2210		Use of RSVP (Resource Reservation Protocol) in Integrated Services	Yes
2209		RSVP (Resource Reservation Protocol) Message Processing Rules	Yes
2206		RSVP (Resource Reservation Protocol) Management Information Base (MIB) using SMIv2 (Structure of Management Information version 2)	Yes
2205	(Updated by RFC2750, RFC3936)	Resource Reservation Protocol (RSVP)—Version 1 Functional Specification	Yes
2178	(Obsoletes RFC1583) (Obsoleted by RFC2328)	OSPF Version 2	Yes
2166		(Advanced Peer-to-Peer Networking) APPN Implementer's Workshop (AIW) Closed Pages Document Data-Link Switching (DLSw) v2.0 Enhancements	Yes
2136	(Updates RFC1035) (Updated by RFC3007, RFC4033, RFC4034, RFC4035)	Dynamic Updates in the Domain Name System (DNS UPDATE)	Yes
2131	(Obsoletes RFC1541) (Updated by RFC3396)	Dynamic Host Configuration Protocol (DHCP)	Yes
2127		ISDN Management Information Base (MIB) using SMIv2 (Structure of Management Information version 2)	Yes
2125		The PPP Bandwidth Allocation Protocol (BAP) / The PPP Bandwidth Allocation Control Protocol (BACP)	Yes
2118		Microsoft Point-to-Point Compression (MPPC) Protocol	Yes
2117	(Obsoleted by RFC2362)	Protocol Independent Multicast-Sparse Mode (PIM-SM): Protocol Specification	Obsoleted or Updated by RFC Cisco IOS Supports
2115	(Obsoletes RFC1315)	Management Information Base (MIB) for Frame Relay DTEs Using SMIv2 (Structure of Management Information version 2)	Yes
2091		Triggered Extensions to RIP to Support Demand Circuits	Yes
2080		RIPng for IPv6	Yes
2073	(Obsoleted by RFC2374)	An IPv6 Provider-Based Unicast Address Format	Obsoleted or Updated by RFC Cisco IOS Supports

RFC Number	RFC Remarks	RFC Title	Cisco Supports? (Yes/No/Partial/Not Applicable/Obsoleted or Updated by RFC Cisco IOS Supports)
2069	(Obsoleted by RFC2617)	An Extension to HTTP : Digest Access Authentication	Obsoleted or Updated by RFC Cisco IOS Supports
2068	(Obsoleted by RFC2616)	Hypertext Transfer Protocol—HTTP/1.1	Obsoleted or Updated by RFC Cisco IOS Supports
2052	(Obsoleted by RFC2782)	A DNS RR (DNS Resource Record) for specifying the location of services Domain Name System Server (DNS SRV)	Obsoleted or Updated by RFC Cisco IOS Supports
2037	(Obsoleted by RFC2737)	Entity MIB (Management Information Base) using SMIv2 (Structure of Management Information version 2)	Yes
2024		Definitions of Managed Objects for Data Link Switching using SMIv2 (Structure of Management Information version 2)	Yes
2018	(Obsoletes RFC1072)	TCP Selective Acknowledgement Options	Yes
2012	(Obsoleted by RFC4022) (Updates RFC1213)	SNMPv2 Management Information Base (MIB) for the Transmission Control Protocol (TCP) using SMIv2 (Structure of Management Information version 2)	Yes
2006		The Definitions of Managed Objects for IP Mobility Support using SMIv2 (Structure of Management Information version 2)	Yes
2003		IP Encapsulation within IP	Yes
2002	(Obsoleted by RFC3220) (Updated by RFC2290)	IP Mobility Support	Yes
1997		BGP Communities Attribute	Yes
1994	(Obsoletes RFC1334) (Updated by RFC2484)	PPP Challenge Handshake Authentication Protocol (CHAP)	Yes
1990	(Obsoletes RFC1717)	The PPP Multilink Protocol (MP)	Yes
1989	(Obsoletes RFC1333)	PPP Link Quality Monitoring	Yes
1982	(Updates RFC1034, RFC1035)	Serial Number Arithmetic	Yes
1981		Path MTU (Maximum Transmission Unit) Discovery for IP version 6 (IPv6)	Yes
1974		PPP Stac LZS Compression Protocol	Yes
1973		PPP in Frame Relay	Yes
1972	(Obsoleted by RFC2464)	A Method for the Transmission of IPv6 Packets over Ethernet Networks	Obsoleted or Updated by RFC Cisco IOS Supports
1971	(Obsoleted by RFC2462)	IPv6 Stateless Address Autoconfiguration	Obsoleted or Updated by RFC Cisco IOS Supports
1970	(Obsoleted by RFC2461)	Neighbor Discovery for IP Version 6 (IPv6)	Obsoleted or Updated by RFC Cisco IOS Supports
1967		PPP LZS-DCP Compression Protocol (LZS-DCP)	Yes
1966	(Updated by RFC2796)	BGP Route Reflection An alternative to full mesh IBGP	Yes
1965	(Obsoleted by RFC3065)	Autonomous System Confederations for BGP	Yes
1962	(Updated by RFC2153)	The PPP Compression Control Protocol (CCP)	Yes
1933	(Obsoleted by RFC2893)	Transition Mechanisms for IPv6 Hosts and Routers	Obsoleted or Updated by RFC Cisco IOS Supports

RFC Number	RFC Remarks	RFC Title	Cisco Supports? (Yes/No/Partial/Not Applicable/Obsoleted or Updated by RFC Cisco IOS Supports)
1918	(Obsoletes RFC1627, RFC1597) (Also BCP0005)	Address Allocation for Private Internets	Yes
1907	(Obsoletes RFC1450) (Obsoleted by RFC3418)	Management Information Base (MIB) for Version 2 of the Simple Network Management Protocol (SNMPv2)	Yes
1906	(Obsoletes RFC1449) (Obsoleted by RFC3417)	Transport Mappings for Version 2 of the Simple Network Management Protocol (SNMPv2)	Yes
1905	(Obsoletes RFC1448) (Obsoleted by RFC3416)	Protocol Operations for Version 2 of the Simple Network Management Protocol (SNMPv2)	Yes
1904	(Obsoletes RFC1444) (Obsoleted by RFC2580)	Conformance Statements for Version 2 of the Simple Network Management Protocol (SNMPv2)	Yes
1889	(Obsoleted by RFC3550)	RTP (Real-Time Protocol): A Transport Protocol for Real-Time Applications. Audio-Video Transport Working Group	Yes
1886	(Obsoleted by RFC3596) (Updated by RFC2874, RFC3152)	DNS Extensions to support IP version 6 (IPv6)	Yes
1885	(Obsoleted by RFC2463)	Internet Control Message Protocol (ICMPv6) for the Internet Protocol Version 6 (IPv6)	Obsoleted or Updated by RFC Cisco IOS Supports
1884	(Obsoleted by RFC2373)	IP Version 6 (IPv6) Addressing Architecture	Obsoleted or Updated by RFC Cisco IOS Supports
1877		PPP Internet Protocol Control Protocol (IPCP) Extensions for Name Server Addresses	Yes
1867	(Obsoleted by RFC2854)	Form-based File Upload in HTML	Yes
1850	(Obsoletes RFC1253)	OSPF Version 2 Management Information Base (MIB)	Yes
1829		The ESP (Encapsulating Security Payload) DES-CBC (Data Encryption Standard—Cipher Block Chaining) Transform	Yes
1828		IP Authentication using Keyed MD5	Yes
1827	(Obsoleted by RFC2406)	IP Encapsulating Security Payload (ESP)	Yes
1826	(Obsoleted by RFC2402)	IP Authentication Header	Yes
1825	(Obsoleted by RFC2401)	Security Architecture for the Internet Protocol (IP)	Obsoleted or Updated by RFC Cisco IOS Supports
1812		Requirements for IP Version 4 Routers	Yes
1795	(Obsoletes RFC1434)	Data Link Switching: Switch-to-Switch Protocol AIW DLSw RIG (Advanced Peer-to-Peer Networking (APPN) Implementers Workshop Data Link Switching Related Interest Group): DLSw Closed Pages, DLSw Standard Version 1.0	Yes
1793	(Updated by RFC3883)	Extending OSPF to Support Demand Circuits	Yes
1771	(Obsoletes RFC1654)	A Border Gateway Protocol 4 (BGP-4)	Yes
1765		OSPF Database Overflow	Yes

RFC Number	RFC Remarks	RFC Title	Cisco Supports? (Yes/No/Partial/Not Applicable/Obsoleted or Updated by RFC Cisco IOS Supports)
1757	(Obsoletes RFC1271) (Obsoleted by RFC2819)	Remote Network Monitoring Management Information Base (MIB)	Yes
1755		ATM Signaling Support for IP over ATM	Yes
1745		BGP4/IDRP for IP---OSPF Interaction	Yes
1724	(Obsoletes RFC1389)	RIP Version 2 MIB (Management Information Base) Extension	Yes
1723	(Obsoletes RFC1388) (Obsoleted by RFC2453) (Updates RFC1058)	RIP Version 2—Carrying Additional Information	Yes
1722		RIP Version 2 Protocol Applicability Statement	Yes
1717	(Obsoleted by RFC1990)	The PPP Multilink Protocol (MP)	Yes
1706	(Obsoletes RFC1637)	DNS NSAP (Network Service Access Point) Resource Records	Yes
1702		Generic Routing Encapsulation (GRE) over IPv4 networks	Yes
1701		Generic Routing Encapsulation (GRE)	Yes
1695	(Obsoleted by RFC2515)	Definitions of Managed Objects for ATM Management Version 8.0 using SMIv2 (Structure of Management Information version 2)	Yes
1663		PPP Reliable Transmission	Yes
1662	(Obsoletes RFC1549)	PPP in HDLC-like Framing	Yes
1661	(Obsoletes RFC1548) (Updated by RFC2153)	The Point-to-Point Protocol (PPP)	Yes
1659	(Obsoletes RFC1317)	Definitions of Managed Objects for RS-232-like Hardware Devices using SMIv2 (Structure of Management Information version 2)	Yes
1657		Definitions of Managed Objects for the Fourth Version of the Border Gateway Protocol (BGP-4) using SMIv2 (Structure of Management Information version 2)	Yes
1654	(Obsoleted by RFC1771)	A Border Gateway Protocol 4 (BGP-4)	Obsoleted or Updated by RFC Cisco IOS Supports
1650	(Obsoleted by RFC2358)	Definitions of Managed Objects for the Ethernet-like Interface Types using SMIv2 (Structure of Management Information version 2)	Obsoleted or Updated by RFC Cisco IOS Supports
1647	(Obsoleted by RFC2355)	TN3270 Enhancements	Yes
1646		TN3270 Extensions for LUsername and Printer Selection	Yes
1638	(Obsoletes RFC1220) (Obsoleted by RFC2878)	PPP Bridging Control Protocol (BCP)	Yes
1637	(Obsoletes RFC1348) (Obsoleted by RFC1706)	DNS NSAP (Network Service Access Point) Resource Records	Obsoleted or Updated by RFC Cisco IOS Supports
1634	(Obsoletes RFC1551, RFC1362)	Novell IPX Over Various WAN Media (IPXWAN)	Yes
1631	(Obsoleted by RFC3022)	The IP Network Address Translator (NAT)	Yes
1627	(Obsoleted by RFC1918)	Network 10 Considered Harmful (Some Practices Shouldn't be Codified)	Obsoleted or Updated by RFC Cisco IOS Supports

RFC Number	RFC Remarks	RFC Title	Cisco Supports? (Yes/No/Partial/Not Applicable/Obsoleted or Updated by RFC Cisco IOS Supports)
1626	(Obsoleted by RFC2225)	Default IP MTU (Maximum Transmission Unit) for use over ATM AAL5 (Asynchronous Transfer Mode Adaptive Layer 5)	Obsoleted or Updated by RFC Cisco IOS Supports
1619	(Obsoleted by RFC2615)	PPP over SONET/SDH (Synchronous Optical Network/Synchronous Digital Hierarchy)	Yes
1618		PPP over ISDN	Yes
1613		Cisco Systems X.25 over TCP (XOT)	Yes
1597	(Obsoleted by RFC1918)	Address Allocation for Private Internets	Obsoleted or Updated by RFC Cisco IOS Supports
1595	(Obsoleted by RFC2558)	Definitions of Managed Objects for the SONET/SDH (Synchronous Optical Network/Synchronous Digital Hierarchy) Interface Type	Yes
1593		SNA APPN (Systems Network Architecture Advanced Peer-to-Peer Networking) Node MIB (Management Information Base)	Yes
1587	(Obsoleted by RFC3101)	The OSPF NSSA (Not-So-Stubby Area) Option	Yes
1583	(Obsoletes RFC1247) (Obsoleted by RFC2178)	OSPF Version 2	Yes
1577	(Obsoleted by RFC2225)	Classical IP and ARP (Address Resolution Protocol) over ATM	Yes
1576		TN3270 Current Practices	Yes
1573		Evolution of the Interfaces Group of MIB-II (Management Information Base-II)	Yes
1570	(Updates RFC1548) (Updated by RFC2484)	PPP LCP (Point-to-Point Protocol Link Control Protocol) Extensions	Yes
1559	(Obsoletes RFC1289)	DECnet Phase IV MIB (Management Information Base) Extensions	Yes
1553		Compressing IPX Headers Over WAN Media (CIPX)	Yes
1552		The PPP Internetworking Packet Exchange Control Protocol (IPXCP)	Yes
1551	(Obsoleted by RFC1634)	Novell IPX Over Various WAN Media (IPXWAN)	Obsoleted or Updated by RFC Cisco IOS Supports
1549	(Obsoleted by RFC1662)	PPP in HDLC Framing	Yes
1548	(Obsoletes RFC1331) (Obsoleted by RFC1661) (Updated by RFC1570)	The Point-to-Point Protocol (PPP)	Yes
1542	(Obsoletes RFC1532) (Updates RFC0951)	Clarifications and Extensions for the Bootstrap Protocol	Yes
1541	(Obsoletes RFC1531) (Obsoleted by RFC2131)	Dynamic Host Configuration Protocol (DHCP)	Obsoleted or Updated by RFC Cisco IOS Supports
1534		Interoperation Between DHCP and BOOTP (Bootstrap Protocol)	Yes
1532	(Obsoleted by RFC1542) (Updates RFC0951)	Clarifications and Extensions for the Bootstrap Protocol	Obsoleted or Updated by RFC Cisco IOS Supports
1519	(Obsoletes RFC1338)	Classless Inter-Domain Routing (CIDR): an Address Assignment and Aggregation Strategy	Yes

RFC Number	RFC Remarks	RFC Title	Cisco Supports? (Yes/No/Partial/Not Applicable/Obsoleted or Updated by RFC Cisco IOS Supports)
1512	(Updates RFC1285)	FDDI Management Information Base (MIB)	Yes
1510		The Kerberos Network Authentication Service (V5)	Yes
1497	(Obsoletes RFC1395, RFC1084, RFC1048) (Obsoleted by RFC1533) (Updates RFC0951)	BOOTP (Bootstrap Protocol) Vendor Information Extensions	Yes
1493	(Obsoletes RFC1286)	Definitions of Managed Objects for Bridges	Yes
1492		An Access Control Protocol, Sometimes Called TACACS	Yes
1490	(Obsoletes RFC1294) (Obsoleted by RFC2427)	Multiprotocol Interconnect over Frame Relay	Obsoleted or Updated by RFC Cisco IOS Supports
1469		IP Multicast over Token-Ring Local Area Networks	Yes
1455	(Obsoleted by RFC2474)	Physical Link Security Type of Service (TOS)	Obsoleted or Updated by RFC Cisco IOS Supports
1450	(Obsoleted by RFC1907)	Management Information Base (MIB) for version 2 of the Simple Network Management Protocol (SNMPv2)	Yes
1449	(Obsoleted by RFC1906)	Transport Mappings for version 2 of the Simple Network Management Protocol (SNMPv2)	Yes
1448	(Obsoleted by RFC1905)	Protocol Operations for version 2 of the Simple Network Management Protocol (SNMPv2)	Yes
1447		Party MIB (Management Information Base) for version 2 of the Simple Network Management Protocol (SNMPv2)	Yes
1445		Administrative Model for Version 2 of the Simple Network Management Protocol (SNMPv2)	Yes
1444	(Obsoleted by RFC1904)	Conformance Statements for version 2 of the Simple Network Management Protocol (SNMPv2)	Yes
1434	(Obsoleted by RFC1795)	Data Link Switching: Switch-to-Switch Protocol	Obsoleted or Updated by RFC Cisco IOS Supports
1413	(Obsoletes RFC0931)	Identification Protocol	Yes
1407	(Obsoletes RFC1233) (Obsoleted by RFC2496)	Definitions of Managed Objects for the DS3/E3 Interface Type	Yes
1406	(Obsoletes RFC1232) (Obsoleted by RFC2495)	Definitions of Managed Objects for the DS1 and E1 Interface Types	Yes
1403	(Obsoletes RFC1364)	BGP OSPF Interaction	Yes
1398	(Obsoletes RFC1284) (Obsoleted by RFC1623)	Definitions of Managed Objects for the Ethernet-Like Interface Types	Yes
1395	(Obsoletes RFC1084, RFC1048) (Obsoleted by RFC1497, RFC1533) (Updates RFC0951)	BOOTP (Bootstrap Protocol) Vendor Information Extensions	Yes
1393		Traceroute Using an IP Option	Yes

RFC Number	RFC Remarks	RFC Title	Cisco Supports? (Yes/No/Partial/Not Applicable/Obsoleted or Updated by RFC Cisco IOS Supports)
1390		Transmission of IP and ARP (Address Resolution Protocol) over FDDI Networks	Yes
1389	(Obsoleted by RFC1724)	RIP Version 2 MIB (Management Information Base) Extensions	Obsoleted or Updated by RFC Cisco IOS Supports
1388	(Obsoleted by RFC1723) (Updates RFC1058)	RIP Version 2 Carrying Additional Information	Yes
1382		SNMP MIB (Management Information Base) Extension for the X.25 Packet Layer	Yes
1381		SNMP MIB (Management Information Base) Extension for X.25 LAPB (Link Access Protocol Balanced)	Yes
1378		The PPP AppleTalk Control Protocol (ATCP)	Partial
1377		The PPP OSI Network Layer Control Protocol (OSINLCP)	Yes
1376	(Obsoleted by RFC1762)	The PPP DECnet Phase IV Control Protocol (DNCP)	Yes
1372	(Obsoletes RFC1080)	Telnet Remote Flow Control Option	Partial—Implemented with the exception of “restart-any” and “restart-xon” sub-options
1370		Applicability Statement for OSPF	Yes
1364	(Obsoleted by RFC1403)	BGP OSPF Interaction	Obsoleted or Updated by RFC Cisco IOS Supports
1362	(Obsoleted by RFC1634)	Novell IPX over Various WAN Media (IPXWAN)	Yes
1356	(Obsoletes RFC0877)	Multiprotocol Interconnect on X.25 and ISDN in the Packet Mode	Yes
1350	(Obsoletes RFC0783) (Updated by RFC1782, RFC1783, RFC1784, RFC1785, RFC2347, RFC2348, RFC2349)	The TFTP (Trivial File Transfer Protocol) Protocol (Revision 2)	Yes
1349	(Obsoleted by RFC2474) (Updates RFC1248, RFC1247, RFC1195, RFC1123, RFC1122, RFC1060, RFC0791)	Type of Service (TOS) in the Internet Protocol (IP) Suite	Yes
1338	(Obsoleted by RFC1519)	Supernetting: an Address Assignment and Aggregation Strategy	Obsoleted or Updated by RFC Cisco IOS Supports
1334	(Obsoleted by RFC1994)	PPP Authentication Protocols	Yes
1333	(Obsoleted by RFC1989)	PPP Link Quality Monitoring	Yes
1332	(Obsoletes RFC1172) (Updated by RFC3241)	The PPP Internet Protocol Control Protocol (IPCP)	Yes
1331	(Obsoletes RFC1171, RFC1172) (Obsoleted by RFC1548)	The Point-to-Point Protocol (PPP) for the Transmission of Multi-protocol Datagrams over Point-to-Point Links	Yes

RFC Number	RFC Remarks	RFC Title	Cisco Supports? (Yes/No/Partial/Not Applicable/Obsoleted or Updated by RFC Cisco IOS Supports)
1323	(Obsoletes RFC1072, RFC1185)	TCP Extensions for High Performance	Yes
1321		The MD5 Message-Digest Algorithm	Yes
1317	(Obsoleted by RFC1659)	Definitions of Managed Objects for RS-232-like Hardware Devices	Yes
1315	(Obsoleted by RFC2115)	Management Information Base (MIB) for Frame Relay DTEs	Yes
1305	(Obsoletes RFC0958, RFC1059, RFC1119)	Network Time Protocol (Version 3) Specification, Implementation	Yes
1294	(Obsoleted by RFC1490, RFC2427)	Multiprotocol Interconnect over Frame Relay	Obsoleted or Updated by RFC Cisco IOS Supports
1293	(Obsoleted by RFC2390)	Inverse Address Resolution Protocol	Obsoleted or Updated by RFC Cisco IOS Supports
1289	(Obsoleted by RFC1559)	DECnet Phase IV MIB (Management Information Base) Extensions	Obsoleted or Updated by RFC Cisco IOS Supports
1286	(Obsoleted by RFC1493, RFC1525)	Definitions of Managed Objects for Bridges	Yes
1285	(Updated by RFC1512)	FDDI Management Information Base (MIB)	Obsoleted or Updated by RFC Cisco IOS Supports
1284	(Obsoleted by RFC1398)	Definitions of Managed Objects for the Ethernet-like Interface Types	Obsoleted or Updated by RFC Cisco IOS Supports
1271	(Obsoleted by RFC1757) (Updated by RFC1513)	Remote Network Monitoring Management Information Base (MIB)	Obsoleted or Updated by RFC Cisco IOS Supports
1268	(Obsoletes RFC1164) (Obsoleted by RFC1655)	Application of the Border Gateway Protocol in the Internet	Yes
1256		ICMP Router Discovery Messages	Yes
1253	(Obsoletes RFC1252) (Obsoleted by RFC1850) (Also RFC1247, RFC1245, RFC1246)	OSPF Version 2 Management Information Base (MIB)	Yes
1252	(Obsoletes RFC1248) (Obsoleted by RFC1253)	OSPF Version 2 Management Information Base (MIB)	Obsoleted or Updated by RFC Cisco IOS Supports
1248	(Obsoleted by RFC1252) (Updated by RFC1349)	OSPF Version 2 Management Information Base (MIB)	Obsoleted or Updated by RFC Cisco IOS Supports
1247	(Obsoletes RFC1131) (Obsoleted by RFC1583) (Updated by RFC1349)	OSPF Version 2	Obsoleted or Updated by RFC Cisco IOS Supports
1243	(Obsoleted by RFC1742)	AppleTalk Management Information Base (MIB)	Yes
1236		IP to X.121 address mapping for DDN	Yes
1234		Tunneling IPX traffic through IP networks	Yes

RFC Number	RFC Remarks	RFC Title	Cisco Supports? (Yes/No/Partial/Not Applicable/Obsoleted or Updated by RFC Cisco IOS Supports)
1233	(Obsoleted by RFC1407) (Updated by RFC1239)	Definitions of managed objects for the DS3 Interface type	Obsoleted or Updated by RFC Cisco IOS Supports
1232	(Obsoleted by RFC1406) (Updated by RFC1239)	Definitions of managed objects for the DS1 Interface type	Obsoleted or Updated by RFC Cisco IOS Supports
1231	(Obsoleted by RFC1743, RFC1748) (Updated by RFC1239)	IEEE 802.5 Token Ring MIB (Management Information Base)	Partial
1220	(Obsoleted by RFC1638)	Point-to-Point Protocol (PPP) extensions for bridging	Yes
1215		Convention for defining traps for use with the SNMP	Yes
1213	(Obsoletes RFC1158) (Updated by RFC2011, RFC2012, RFC2013)	Management Information Base (MIB) for Network Management of TCP/IP-based internets:MIB-II	Yes
1212		Concise MIB (Management Information Base) definitions	Yes
1209		Transmission of IP datagrams over the SMDS (Switched Multimegabit Data Service) Service	Yes
1196	(Obsoletes RFC1194, RFC0742) (Obsoleted by RFC1288)	Finger User Information Protocol	Yes
1195	(Updated by RFC1349)	Use of OSI IS-IS for routing in TCP/IP and dual environments	Yes
1194	Obsoletes RFC0742) (Obsoleted by RFC1196, RFC1288)	Finger User Information Protocol	Obsoleted or Updated by RFC Cisco IOS Supports
1191	(Obsoletes RFC1063)	Path MTU (Maximum Transmission Unit) discovery	Yes
1185	(Obsoleted by RFC1323)	TCP Extension for High-Speed Paths	Obsoleted or Updated by RFC Cisco IOS Supports
1172	(Obsoleted by RFC1331, RFC1332)	Point-to-Point Protocol (PPP) initial configuration options	Yes
1171	(Obsoletes RFC1134) (Obsoleted by RFC1331)	Point-to-Point Protocol (PPP) for the transmission of multi-protocol datagrams over Point-to-Point links	Obsoleted or Updated by RFC Cisco IOS Supports
1164	(Obsoleted by RFC1268)	Application of the Border Gateway Protocol in the Internet	Obsoleted or Updated by RFC Cisco IOS Supports
1158	(Obsoleted by RFC1213)	Management Information Base (MIB) for network management of TCP/IP-based internets: MIB-II	Obsoleted or Updated by RFC Cisco IOS Supports
1157	(Obsoletes RFC1098)	Simple Network Management Protocol (SNMP)	Yes
1144		Compressing TCP/IP headers for low-speed serial links	Yes
1141	(Updates RFC1071) (Updated by RFC1624)	Incremental updating of the Internet checksum	Yes
1139	(Obsoleted by RFC1574, RFC1575)	Echo function for ISO 8473	Yes

RFC Number	RFC Remarks	RFC Title	Cisco Supports? (Yes/No/Partial/Not Applicable/Obsoleted or Updated by RFC Cisco IOS Supports)
1136		Administrative Domains and Routing Domains: A model for routing in the Internet	Yes
1123	(Updates RFC0822) (Updated by RFC1349, RFC2181)	Requirements for Internet Hosts—Application and Support	Obsoleted or Updated by RFC Cisco IOS Supports
1122	(Updated by RFC1349)	Requirements for Internet Hosts—Communication Layers	Yes
1119	(Obsoletes RFC0958, RFC1059) (Obsoleted by RFC1305)	Network Time Protocol (version 2) specification and implementation	Obsoleted or Updated by RFC Cisco IOS Supports
1112	(Obsoletes RFC0988, RFC1054) (Updated by RFC2236)	Host extensions for IP multicasting	Yes
1108	(Obsoletes RFC1038)	U.S. Department of Defense (DoD) Security Options for the Internet Protocol (IP)	Yes
1101	(Updates RFC1034, RFC1035)	DNS encoding of network names and other types	Yes
1098	(Obsoletes RFC1067) (Obsoleted by RFC1157)	Simple Network Management Protocol (SNMP)	Obsoleted or Updated by RFC Cisco IOS Supports
1091	(Obsoletes RFC0930)	Telnet terminal-type option	Yes
1084	(Obsoletes RFC1048) (Obsoleted by RFC1395, RFC1497, RFC1533)	BOOTP (Bootstrap Protocol) vendor information extensions	Yes
1080	(Obsoleted by RFC1372)	Telnet remote flow control option	Yes
1079		Telnet terminal speed option	Yes
1075		Distance Vector Multicast Routing Protocol (DVMRP)	Yes
1072	(Obsoleted by RFC1323, RFC2018)	TCP extensions for long-delay paths	Obsoleted or Updated by RFC Cisco IOS Supports
1071	(Updated by RFC1141)	Computing the Internet checksum	Obsoleted or Updated by RFC Cisco IOS Supports
1070		Use of the Internet as a subnetwork for experimentation with the OSI network layer	Yes
1069	(Obsoletes RFC0986)	Guidelines for the use of Internet-IP addresses in the ISO Connectionless-Mode Network Protocol	Yes
1063	(Obsoleted by RFC1191)	IP MTU (Maximum Transmission Unit) discovery options	Obsoleted or Updated by RFC Cisco IOS Supports
1060	(Obsoletes RFC1010) (Obsoleted by RFC1340) (Updated by RFC1349)	Assigned numbers	Obsoleted or Updated by RFC Cisco IOS Supports
1059	(Obsoletes RFC0958) (Obsoleted by RFC1119, RFC1305)	Network Time Protocol (version 1) specification and implementation	Obsoleted or Updated by RFC Cisco IOS Supports

RFC Number	RFC Remarks	RFC Title	Cisco Supports? (Yes/No/Partial/Not Applicable/Obsoleted or Updated by RFC Cisco IOS Supports)
1058	(Updated by RFC1388, RFC1723)	Routing Information Protocol (RIP)	Yes
1055		Nonstandard for transmission of IP datagrams over serial lines: SLIP	Yes
1054	Obsoletes RFC0988 (Obsoleted by RFC1112)	Host extensions for IP multicasting	Obsoleted or Updated by RFC Cisco IOS Supports
1048	(Obsoleted by RFC1084, RFC1395, RFC1497, RFC1533)	BOOTP (Bootstrap Protocol) vendor information extensions	Obsoleted or Updated by RFC Cisco IOS Supports
1042	(Obsoletes RFC0948)	Standard for the transmission of IP datagrams over IEEE 802 networks	Yes
1038	(Obsoleted by RFC1108)	Draft revised IP security option	Obsoleted or Updated by RFC Cisco IOS Supports
1035	(Obsoletes RFC0973, RFC0882, RFC0883) (Updated by RFC1101, RFC1183, RFC1348, RFC1876, RFC1982, RFC1995, RFC1996, RFC2065, RFC2136, RFC2181, RFC2137, RFC2308, RFC2535, RFC2845, RFC3425, RFC3658, RFC4033, RFC4034, RFC4035)	Domain names—implementation and specification	Yes
1034	(Obsoletes RFC0973, RFC0882, RFC0883) (Updated by RFC1101, RFC1183, RFC1348, RFC1876, RFC1982, RFC2065, RFC2181, RFC2308, RFC2535, RFC4033, RFC4034, RFC4035)	Domain names—concepts and facilities	Yes
1027		Using ARP (Address Resolution Protocol) to implement transparent subnet gateways	Yes
995		End System to Intermediate System Routing Exchange Protocol for use in conjunction with ISO 8473. International Organization for Standardization	Yes
994	(Obsoletes RFC0926)	Final text of DIS 8473, Protocol for Providing the Connectionless-mode Network Service. International Organization for Standardization	Yes

RFC Number	RFC Remarks	RFC Title	Cisco Supports? (Yes/No/Partial/Not Applicable/Obsoleted or Updated by RFC Cisco IOS Supports)
988	(Obsoletes RFC0966) (Obsoleted by RFC1054, RFC1112)	Host extensions for IP multicasting	Obsoleted or Updated by RFC Cisco IOS Supports
986	(Obsoleted by RFC1069)	Guidelines for the use of Internet-IP addresses in the ISO Connectionless-Mode Network Protocol	Obsoleted or Updated by RFC Cisco IOS Supports
982		Guidelines for the specification of the structure of the Domain Specific Part (DSP) of the ISO standard NSAP (Network Service Access Point) address	Yes
974	(Obsoleted by RFC2821)	Mail routing and the domain system	Yes
973	Obsoleted by RFC1034, RFC1035) (Updates RFC0882, RFC0883)	Domain system changes and observations	Obsoleted or Updated by RFC Cisco IOS Supports
958	(Obsoleted by RFC1059, RFC1119, RFC1305)	Network Time Protocol (NTP)	Obsoleted or Updated by RFC Cisco IOS Supports
951	(Updated by RFC1395, RFC1497, RFC1532, RFC1542)	Bootstrap Protocol (BootP)	Yes
950	(Updates RFC0792)	Internet Standard Subnetting Procedure	Yes
948	(Obsoleted by RFC1042)	Two methods for the transmission of IP datagrams over IEEE 802.3 networks	Obsoleted or Updated by RFC Cisco IOS Supports
931	(Obsoletes RFC0912) (Obsoleted by RFC1413)	Authentication server	Obsoleted or Updated by RFC Cisco IOS Supports
930	Obsoletes RFC0884) (Obsoleted by RFC1091)	Telnet terminal type option	Obsoleted or Updated by RFC Cisco IOS Supports
926	(Obsoleted by RFC0994)	Protocol for providing the connectionless mode network services	Obsoleted or Updated by RFC Cisco IOS Supports
925		Multi-LAN Address Resolution (PROXY ARP)	Yes
922		Broadcasting Internet Datagrams in the Presence of Subnets (IP_BROAD)	Yes
919		Broadcasting Internet Datagrams	Yes
906		Bootstrap loading using TFTP (Trivial File Transfer Protocol)	Yes
904	(Updates RFC0827, RFC0888)	Exterior Gateway Protocol (EGP) Formal Specification	Yes
903		Reverse Address Resolution Protocol (RARP)	Yes
896		Congestion control in IP/TCP internetworks	Yes
895		Standard for the transmission of IP datagrams over experimental Ethernet networks	Yes
894		Standard for the transmission of IP datagrams over Ethernet networks	Yes
891		DCN local-network protocols	Yes
888	(Updated by RFC0904)	"STUB" Exterior Gateway Protocol	Obsoleted or Updated by RFC Cisco IOS Supports

RFC Number	RFC Remarks	RFC Title	Cisco Supports? (Yes/No/Partial/Not Applicable/Obsoleted or Updated by RFC Cisco IOS Supports)
883	(Obsoleted by RFC1034, RFC1035) (Updated by RFC0973)	Domain names: Implementation specification	Obsoleted or Updated by RFC Cisco IOS Supports
882	(Obsoleted by RFC1034, RFC1035) (Updated by RFC0973)	Domain names: Concepts and facilities	Obsoleted or Updated by RFC Cisco IOS Supports
879		TCP maximum segment size and related topics	Yes
877	(Obsoleted by RFC1356)	Standard for the transmission of IP datagrams over public data networks	Yes
874		Critique of X.25	Yes
863		Discard Service (TCP Discard)	Yes
862		Echo Service (TCP Echo)	Yes
860		Telnet Timing Mark Option	Yes
858		Telnet Suppress Go Ahead Option	Yes
857		Telnet Echo Option	Yes
856		Telnet Binary Transmission	Yes
855		Telnet Option Specifications	Yes
854	(Obsoletes RFC0764)	Telnet Protocol Specification	Yes
827	(Updated by RFC0904)	Exterior Gateway Protocol (EGP)	Yes
826		Ethernet Address Resolution Protocol: Or converting network protocol addresses to 48.bit Ethernet address for transmission on Ethernet hardware	Yes
815		IP datagram reassembly algorithms	Yes
813		Window and Acknowledgement Strategy in TCP	Yes
793	(Updated by RFC3168)	Transmission Control Protocol (TCP)	Yes
792	(Obsoletes RFC0777) (Updated by RFC0950)	Internet Control Message Protocol (ICMP)	Yes
791	(Obsoletes RFC0760) (Updated by RFC1349)	Internetwork Protocol (IP)	Yes
783	(Obsoleted by RFC1350)	TFTP (Trivial File Transfer Protocol) Protocol (revision 2)	Yes
779		Telnet send-location option	Yes
777	(Obsoleted by RFC0792)	Internet Control Message Protocol	Obsoleted or Updated by RFC Cisco IOS Supports
768		User Datagram Protocol (UDP)	Yes
764	(Obsoleted by RFC0854)	Telnet Protocol specification	Obsoleted or Updated by RFC Cisco IOS Supports
760	(Obsoleted by RFC0791) (Updated by RFC0777)	Department of Defense (DoD) standard Internet Protocol (IP)	Obsoleted or Updated by RFC Cisco IOS Supports
742	(Obsoleted by RFC1288, RFC1196, RFC1194)	NAME/FINGER Protocol	Obsoleted or Updated by RFC Cisco IOS Supports

The full text for each RFC may be obtained at: <http://www.rfc-editor.org/>

Institute of Electrical and Electronics Engineers (IEEE) Standards

Table 2. IEEE standards supported in Cisco IOS Software Releases 12.4 and 12.2S

IEEE Standard	Working Group
802.1	LAN/MAN Bridging and Management
802.1Q	Virtual LANs
802.3	CSMA/CD (Ethernet)
802.5	LAN/MAN Token-Ring Access Method

The full text for each IEEE standard may be obtained at: <http://www.ieee.com>

Asynchronous Transfer Mode (ATM) Forum Standards

Table 3. ATM Forum standards supported in Cisco IOS Software Releases 12.4 and 12.2S

Technical Working Group	Approved Specifications	Specification	Approved Date
Physical Layer	Issued as part of UNI 3.1: 44.736 DS3 Mbps Physical Layer 100 Mbps Multimode Fiber Interface Physical Layer 155.52 Mbps SONET STS-3c Physical Layer 155.52 Mbps Physical Layer	af-uni-0010.002	Currently Available to Members Only
AIC/ATM-IP Collaboration (formerly LanE)	Multi-Protocol Over ATM Specification v1.0	af-mpoa-0087.000	July, 1997
ILMI (Integrated Local Mgmt. Interface)	ILMI 4.0	af-ilmi-0065.000	Sep, 1996
P-NNI	Private Network-Network Interface Specification V. 1.0	af-pnni-0055.000	Mar, 1996
AIC/ATM-IP Collaboration (formerly LanE)	LAN Emulation over ATM 1.0	af-lane-0021.000	Jan, 1995

The full text for each ATM Forum standard may be obtained at: <http://www.atmforum.com>

Frame Relay Forum Standards

Table 4. Frame Relay Forum standards supported in Cisco IOS Software Releases 12.4 and 12.2S

FRF Number	Title	Date
FRF.1.2	PVC User-to-Network Interface (UNI) Implementation Agreement	July-00
FRF.2.2	Frame Relay Network-to-Network Interface (NNI) Implementation Agreement	Mar-02
FRF.3.2	Frame Relay Multiprotocol Encapsulation Implementation Agreement	April-00
FRF.4.1	SVC User-to-Network Interface (UNI) Implementation Agreement	January-00
FRF.5	Frame Relay/ATM PVC Network Interworking Implementation	December-94
FRF.8.2	Frame Relay / ATM PVC Service Interworking Implementation Agreement	February-04
FRF.9	Data Compression Over Frame Relay Implementation Agreement	January-96
FRF.11.1	Voice over Frame Relay Implementation Agreement	May 1997— Annex J added March 1999
FRF.12	Frame Relay Fragmentation Implementation Agreement	Dec-97
FRF.16.1	Multilink Frame Relay UNI/NNI Implementation Agreement	May-02

The full text for each Frame Relay Forum standard may be obtained at: <http://www.frforum.com>

International Telecommunication Union (ITU) Standards

Table 5. ITU standards supported in Cisco IOS Software Releases 12.4 and 12.2S

ITU Standard	Year	Notes
X.3	1984	Mandatory elements and many optional elements
X.25	1984	See NET2 and GOSIP certifications
X.28	1993	
X.29	1984	
X.31—X.25 on ISDN		
X.121		Addressing scheme
H.323		Packet-based multimedia communications systems
T.37		Procedures for the transfer of facsimile data via store-and-forward on the Internet
T.38		Procedures for real-time Group 3 facsimile communication over IP networks
T.38		Procedures for real-time Group 3 facsimile communication over IP networks, Amendment 1
Revised Annex B of Recommendation T.38		
Voice CODEC g711alaw		G.711 A Law 64000 bps
Voice CODEC g711ulaw		G.711 u Law 64000 bps
Voice CODEC g723ar53		G.723.1 ANNEX-A 5300 bps
Voice CODEC g723ar63		G.723.1 ANNEX-A 6300 bps
Voice CODEC g723r53		G.723.1 5300 bps
Voice CODEC g723r63		G.723.1 6300 bps
Voice CODEC g726r16		G.726 16000 bps
Voice CODEC g726r24		G.726 24000 bps
Voice CODEC g726r32		G.726 32000 bps
Voice CODEC g728		G.728 16000 bps
Voice CODEC g729br8		G.729 ANNEX-B 8000 bps
Voice CODEC g729r8		G.729 8000 bps
Voice CODEC gsmefr		GSMEFR 12200 bps
Voice CODEC gsmfr		GSMFR 13200 bps
Q.931 and related standards		ISDN user-network interface layer 3 specification for basic call control

More information for each ITU standard may be obtained at: <http://www.itu.int/>

International Organization for Standardization (ISO) Standards

Table 6. ISO standards supported in Cisco IOS Software Releases 12.4 and 12.2S

ISO Standard	Year	Category	Description
ISO 8473-1	1998	Information technology	Protocol for providing the connectionless-mode network service: Protocol specification
ISO 10589/Amd1	1996	Information technology	Telecommunications and information exchange between systems—Intermediate system to Intermediate system (IS-IS) intra-domain routing information exchange protocol for use in conjunction with the protocol for providing the connectionless-mode Network Service (ISO 8473)—Amendment 1: Implementation conformance statement proformas
ISO 8348/Amd2	1991	Information technology	Open Systems Interconnection—Network Service Definition—Documents NSAP (Network Service Access Point) addresses
ISO 9542	1988	Information processing systems	Telecommunications and information exchange between systems—End system to Intermediate system (ES-IS) routing exchange protocol for use in conjunction with the Protocol for providing the connectionless-mode network service (ISO 8473)

More information for each ISO standard may be obtained at: <http://www.iso.org/>

Additional Standards

Table 7. Additional Standards and Organizations

Standard Group	Date	Title	Note
VoiceXML	23-Oct-01	VoiceXML Version 2.0 , W3C Working Draft that defines VoiceXML	http://www.w3.org/Voice/
PacketCable	1-Dec-99	PSTN Gateway Call Signaling Protocol Specification (Pkt-SP-TGCP-D02-991028)	http://www.packetcable.com/
PacketCable	1-Dec-99	Network-Based Call Signaling Protocol Specification (PKT-SP-EC-MGCP-I02-991201)	http://www.packetcable.com/
PacketCable	24-Oct-99	PSTN Gateway Call Signaling Protocol Specification, Pkt-SP-TGCP-101-991024	http://www.packetcable.com/
PacketCable	24-Oct-99	Network-Based Call Signaling Protocol Specification, Pkt-SP-EC-MGCP-102-991024	http://www.packetcable.com/
Telecordia		Telecordia SM 1.5 (Simple Gateway Control Protocol)	
ECMA-262	1-Aug-98	ECMAScript Language Specification , 3rd edition— Defines the ECMAScript scripting language	http://www.ecma-international.org/
ECMA QSIG Standards		ECMA 141	http://www.ecma-international.org/
ECMA QSIG Standards		ECMA 142	http://www.ecma-international.org/
ECMA QSIG Standards		ECMA 143(ETSI300-172)	http://www.ecma-international.org/
ECMA QSIG Standards		ECMA 165(ETSI239)	http://www.ecma-international.org/
ECMA QSIG Standards		ECMA Q.SIG v1 & v2	http://www.ecma-international.org/



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