

Feature Not Available

CISCO IOS VERSION 12.4(9)T2	BASE IP	ADVANCED SECURITY
AAA Broadcast Accounting	X	X
AAA CLI Stop Record Enhancement	X	X
AAA DNIS Map for Authorization	X	X
AAA Double Authentication Secured by Absolute Timeout	X	X
AAA Resource Accounting	X	X
AAA Server Group	X	X
AAA Server Group Deadtimer	X	X
AAA Server Group Enhancements	X	X
AAA Server Groups Based on DNIS	X	X
AAA Support for MSCHAPv2 Password Aging	X	X
AAA-PPP-VPDN Non-Blocking	X	X
AAA-SERVER-MIB Set Operation	X	X
AAL1 CES on AIM-ATM	X	X
Ability to Disable Xauth for Static IPsec Peers		X
Accounting of VPDN Disconnect Cause	X	X
ACL - Ability to Filter on the TTL Value	X	X
ACL - Support for Non-Contiguous Port Ranges on an ACE	X	X
ACL - TCP Flags Filtering	X	X
ACL Authentication of Incoming RSH and RCP	X	X
ACL Default Direction	X	X
ACL IP Options Selective Drop	X	X
ACL Manageability	X	X
ACL Sequence Numbering	X	X
ACL Support for Filtering IP Options	X	X
Active Probe Source Address		X
Adaptive Frame Relay Traffic Shaping for Interface Congestion	X	X
Additional Vendor-Proprietary RADIUS Attributes	X	X
Address Resolution Protocol (ARP)	X	X
ADSL - Asymmetric Digital Subscriber Line Support	X	X
ADSL over ISDN	X	X
ADSL over POTS with Dying Gasp	X	X
Advanced Encryption Standard (AES)		X

CISCO IOS VERSION 12.4(9)T2	BASE IP	ADVANCED SECURITY
Always On Dynamic ISDN (AO/DI)	X	X
Always On Dynamic ISDN (AO/DI) Enhancements	X	X
Application Inspection And Control for HTTP - Phase 2		X
ARP Optimization	X	X
ARP-Auto Logoff	X	X
Asynchronous Call Queueing by Role	X	X
Asynchronous Line Monitoring	X	X
Asynchronous Rotary Line Queueing	X	X
Asynchronous Serial Traffic Over UDP	X	X
ATM Cell Loss Priority (CLP) Bit Marking	X	X
ATM Cell Loss Priority (CLP) Setting	X	X
ATM Cell Switching for Voice/Data Traffic Over ATM	X	X
ATM Mode for Four-Wire SHDSL	X	X
ATM Mode for Two-Wire SHDSL	X	X
ATM Multilink PPP Support on Multiple VCs	X	X
ATM Oversubscription for DSL	X	X
ATM Routed Bridge Encapsulation (RBE)	X	X
ATM Subinterface MIB/Traps	X	X
Attribute Filtering Per-Domain and VRF Aware Framed-Routes	X	X
Attribute Screening For Access Requests	X	X
Authentication Proxy Accounting for HTTP		X
Authorization for Protocol Translation	X	X
Auto Secure Manageability	X	X
AutoInstall over Frame Relay-ATM Interworking Connections	X	X
AutoInstall Using DHCP for LAN Interfaces	X	X
Automatic modem configuration	X	X
AutoRP Enhancement	X	X
AutoSecure	X	X
AutoSecure Customization and Audit Trail Enhancements	X	X
Bandwidth Allocation Control Protocol (BACP)	X	X
BGP		X
BGP 4		X
BGP 4 Multipath Support		X
BGP 4 Prefix Filter and In-bound Route Maps		X

CISCO IOS VERSION 12.4(9)T2	BASE IP	ADVANCED SECURITY
BGP 4 Soft Config		X
BGP Conditional Route Injection		X
BGP Configuration Using Peer Templates		X
BGP Convergence Optimization		X
BGP Cost Community		X
BGP Cost Community Support for EIGRP MPLS VPN PE-CE		X
BGP Dynamic Update Peer-Groups		X
BGP Hide Local-Autonomous System		X
BGP Hybrid CLI Support		X
BGP Increased Support of Numbered as-path Access Lists		X
BGP Link Bandwidth		X
BGP Multipath Load Sharing for Both eBGP and iBGP in an MPLS-VPN		X
BGP Named Community Lists		X
BGP Policy Accounting		X
BGP Policy Accounting Output Interface Accounting		X
BGP Prefix-Based Outbound Route Filtering		X
BGP Reduction in Transient Memory Usage		X
BGP Restart Neighbor Session After max-prefix Limit Reached		X
BGP Route-Map Continue		X
BGP Route-Map Continue Support for Outbound Policy		X
BGP Route-Map Policy List Support		X
BGP Selective Address Tracking		X
BGP Soft Reset		X
BGP Support for Dual AS Configuration for Network AS Migrations		X
BGP Support for IP Prefix Import from Global Table into a VRF Table		X
BGP Support for Named Extended Community Lists		X
BGP Support for Sequenced Entries in Extended Community Lists		X
BGP Support for TTL Security Check		X
Bidirectional PIM	X	X
Bridge Control Protocol (BCP) Support	X	X
Bridged 1483 Encapsulated Traffic over ATM SVCs	X	X
Bridging between IEEE 802.1Q vLANs	X	X
Broadcast Key Rotation	X	X
Broadcast/Multicast Suppression	X	X

CISCO IOS VERSION 12.4(9)T2	BASE IP	ADVANCED SECURITY
Cache Control Enhancements for Certification Revocation Lists	X	X
Call Admission Control for IKE		X
CDP (Cisco Discovery Protocol) Version 2	X	X
CEF on Multipoint GRE Tunnels	X	X
CEF Support for Dialer Profile	X	X
CEF Support for IP Routing between IEEE 802.1Q VLANs	X	X
CEF/dCEF - Cisco Express Forwarding	X	X
Certificate - Authority (CA) Key Rollover	X	X
Certificate - Auto Enrollment	X	X
Certificate - Complete Chain Validation	X	X
Certificate - Enrollment Enhancements	X	X
Certificate - Security Attribute-Based Access Control	X	X
Certificate - Storage Location Specification	X	X
Certification Authority Interoperability (CA)	X	X
CGMP - Cisco Group Management Protocol	X	X
Challenge Handshake Authentication Protocol (CHAP)	X	X
Channelized E1 Signaling	X	X
Circuit Interface Identification Persistence for SNMP	X	X
Cisco Compatible Extensions Information Element	X	X
Cisco Discovery Protocol (CDP) over ATM	X	X
Cisco IOS Certificate Server	X	X
Cisco IOS Login Enhancements	X	X
Cisco IOS Resilient Configuration	X	X
Class Based Ethernet CoS Matching & Marking (802.1p & ISL CoS)	X	X
Class Based Traffic Policing with CLP Tagging	X	X
Class Based Weighted Fair Queuing (CBWFQ)	X	X
Class-Based Frame-Relay DE-Bit Matching and Marking	X	X
Class-Based Marking	X	X
Class-Based Policing	X	X
Class-Based Shaping	X	X
Classless InterDomain Routing (CIDR) IP Default Gateway	X	X
Clear Channel T3/E3 with Integrated CSU/DSU	X	X
Clear IP Traffic CLI	X	X
CLI String Search	X	X

CISCO IOS VERSION 12.4(9)T2	BASE IP	ADVANCED SECURITY
CLI Views	X	X
ClickStart	X	X
CLNS Support for GRE Tunneling of IPv4 and IPv6		X
CNS - Agents SSL Security	X	X
CNS - Configuration Agent	X	X
CNS - Enhanced Results Message	X	X
CNS - Event Agent	X	X
CNS - Flow Through Provisioning	X	X
CNS - Frame Relay Zero Touch	X	X
CNS - Image Agent	X	X
CNS - Security Enhancement	X	X
Command Scheduler (Kron)	X	X
Commented IP Access List Entries	X	X
Committed Access Rate (CAR)	X	X
Compressed RTP (cRTP) - DSL interfaces	X	X
Compression Control Protocol	X	X
Config Logger Enhancements for EAL4+ Certification	X	X
Configurable Domain Name Prefix and Suffix Stripping	X	X
Configurable per ATM-VC Hold Queue size	X	X
Configurable Radio Transmit Power	X	X
Configuration Change Notification and Logging	X	X
Configuration Replace and Configuration Rollback	X	X
Connect-Info RADIUS Attribute 77	X	X
Connection-Mode Network Service (CMNS)	X	X
Contact Closure Network Module	X	X
Content Engine Network Module for Caching and Content Delivery	X	X
Context-Based Access Control (CBAC)		X
Contextual Configuration Diff Utility	X	X
Control Plane DSCP Support for RSVP	X	X
Control Plane Logging	X	X
Control Plane Policing - Time based	X	X
Control Plane Policing (CPP)	X	X
Control Plane Policing Manageability	X	X
COPS for RSVP	X	X

CISCO IOS VERSION 12.4(9)T2	BASE IP	ADVANCED SECURITY
CPP Policy Manager	X	X
CPU Thresholding Notification	X	X
Crashinfo Support	X	X
Crypto Access Check	X	X
Crypto Conditional Debug Support		X
CT1/RBS (Robbed Bit Signaling)	X	X
CUG Selection Facility Suppress Option	X	X
Custom Queueing (CQ)	X	X
Customer Profile Idle Timer Enhancements for Interesting Traffic	X	X
Default Passive Interface	X	X
Default Route on a PPP Virtual Access Interface	X	X
DF Bit Override Functionality with IPSec Tunnels		X
DHCP - Configurable DHCP Client	X	X
DHCP - Statically Configured Routes Using a DHCP Gateway	X	X
DHCP Accounting	X	X
DHCP Address Allocation using Option 82	X	X
DHCP Authorized ARP	X	X
DHCP Client	X	X
DHCP Client - Dynamic Subnet Allocation API	X	X
DHCP Client on WAN Interfaces	X	X
DHCP Lease Limit per ATM/RBE unnumbered interface	X	X
DHCP ODAP Server Support	X	X
DHCP On Demand Address Pool (ODAP) Manager for non-MPLS VPN pools	X	X
DHCP Option 82 Support for Routed Bridge Encapsulation	X	X
DHCP Proxy Client	X	X
DHCP Relay - MPLS VPN Support	X	X
DHCP Relay Accounting	X	X
DHCP Relay Agent Support for Unnumbered Interfaces	X	X
DHCP Relay Option 82 - Per Interface Support	X	X
DHCP Release and Renew CLI in Exec Mode	X	X
DHCP Secured IP Address Assignment	X	X
DHCP Server	X	X
DHCP Server - On Demand Address Pool Manager	X	X
DHCP Server - Option to Ignore all BOOTP Requests	X	X

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DHCP Server Options - Import and Autoconfiguration	X	X
Dial Backup	X	X
Dial on Demand Authentication Enhancements	X	X
Dialer CEF	X	X
Dialer Idle Timer Inbound Traffic Configuration	X	X
Dialer Map VRF Aware	X	X
Dialer Persistent	X	X
Dialer Profiles	X	X
Dialer Watch	X	X
Dialer Watch Connect Delay	X	X
Dial-on-demand	X	X
Diffie-Hellman Group 5		X
Diffserv Compliant WRED	X	X
Digital J1 Voice Support	X	X
Direct http enroll with CA servers	X	X
Distinguished Name Based Crypto Maps		X
Distributed Class-Based Weighted Fair Queueing (dCBWFQ)	X	X
Distributed Management Event MIB Persistence	X	X
Distributed Management Expression MIB persistence	X	X
Distributed Weighted Random Early Detection (dWRED)	X	X
DLR Enhancements: PGM RFC-3208 Compliance	X	X
DMVPN Manageability Enhancements	X	X
DNS - VRF aware DNS	X	X
DNS based X.25 routing	X	X
DNS Proxy	X	X
Double Authentication	X	X
DPNSS Backhaul	X	X
DRP Server Agent		X
Dynamic DNS Support for Cisco IOS	X	X
Dynamic Frequency Selection (DFS) and IEEE 802.11h Transmit Power Control	X	X
Dynamic Multiple Encapsulation for Dial-in over ISDN	X	X
Dynamic Per VRF AAA	X	X
Dynamic Subscriber Bandwidth Selection	X	X
Dynamic Trunking Protocol (DTP)	X	X

CISCO IOS VERSION 12.4(9)T2	BASE IP	ADVANCED SECURITY
E1 R2 Collect Call Blocking	X	X
E1 R2 Signaling	X	X
Easy IP (Phase 1)	X	X
Easy Secure Device Deployment (Easy SDD) - Phase 4	X	X
Easy VPN Client RSA - Signature Support		X
Easy VPN Remote		X
Easy VPN Remote : Multiple Inside Interface Enhancements		X
Easy VPN Remote Enhancements		X
Easy VPN Remote Web Based Activation		X
Easy VPN Remote: Local-Address Support		X
Easy VPN Remote: Manual Tunnel Control Enhancement		X
Easy VPN Server		X
EasyVPN Phase 6		X
EasyVPN Phase 7		X
EasyVPN phase 7.1		X
EasyVPN Server Enhancements		X
EIGRP MPLS VPN PE-CE Site of Origin (SoO)	X	X
EIGRP Stub Routing	X	X
EIGRP Support for Route Map Filtering	X	X
Email Inspection Engine		X
Embedded Event Manager (EEM) 1.0		X
Embedded Event Manager (EEM) 2.1		X
Embedded Event Manager (EEM) 2.2		X
Encrypted Kerberized Telnet		X
Encrypted Pre-shared Key		X
Encrypted Vendor Specific Attributes	X	X
End of Record functionality for DCN networks	X	X
Enhanced cRTP for links with high delay, packet loss and reordering	X	X
Enhanced IGRP (EIGRP)	X	X
Enhanced Local Management Interface (ELMI)	X	X
Enhanced Packet Marking	X	X
Enhanced Password Security	X	X
Enhanced Test Command	X	X
Enhanced Tracking Support	X	X

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EOT Support for carrier delay	X	X
EtherChannel - Flexible PAgP	X	X
Ethernet Local Management Interface	X	X
ETSI Call Transfer	X	X
Event Tracer	X	X
Exporting and Importing RSA Keys	X	X
Express RTP and TCP Header Compression on Dialer interfaces	X	X
Extended ACL support for IGMP to support SSM in IPv4	X	X
Extended Simple Mail Transfer Protocol (ESMTP) for IOS Firewall		X
EzSDD Phase III	X	X
Fast Fragmentation (Fast-Switched Fragmented IP Packets)	X	X
Fast-Switched Policy Routing	X	X
Fast-Switched SRTLB		X
FHRP - Enhanced Object Tracking of IP SLAs		X
FHRP - EOT integration with EEM		X
FHRP - HSRP - Hot Standby Router Protocol V2	X	X
FHRP - HSRP Group Shutdown	X	X
FHRP - HSRP Multiple Group Optimization	X	X
FHRP - Object Tracking List	X	X
FHRP - VRRP - Object Tracking	X	X
Firewall ACL Bypass		X
Firewall Authentication Proxy		X
Firewall Authentication Proxy for FTP and Telnet Sessions		X
Firewall Feature Set		X
Firewall Intrusion Detection System		X
Firewall N2H2 Support		X
Firewall Stateful Inspection of ICMP		X
Firewall Support for SIP		X
Firewall Support of Skinny Client Control Protocol (SCCP)		X
Firewall Support of SSL Encrypted HTTP Authentication Proxy Sign-on		X
Firewall Websense URL Filtering		X
Flexible NetFlow	X	X
Flexible Packet Matching		X
Flow-Based WRED	X	X

CISCO IOS VERSION 12.4(9)T2	BASE IP	ADVANCED SECURITY
FPM CCE Integration including XML CCE infrastructure		X
Frame Mode TDM over G.shdsl	X	X
Frame Relay	X	X
Frame Relay - FRF.1.2 Annex A	X	X
Frame Relay - FRF.5 & FRF.8	X	X
Frame Relay - Multilink (MLFR-FRF.16)	X	X
Frame Relay - PVC Bundles with IP QoS Support	X	X
Frame Relay - PVC Bundles with MPLS QoS Support	X	X
Frame Relay 64-bit Counters	X	X
Frame Relay ELMI Address Registration	X	X
Frame Relay Encapsulation	X	X
Frame Relay End-to-End Keepalive	X	X
Frame Relay Fragmentation (FRF.12)	X	X
Frame Relay Fragmentation with Hardware Compression		X
Frame Relay FRF.9 Payload Compression	X	X
Frame Relay PVC Interface Priority Queueing	X	X
Frame Relay Queuing and Fragmentation at the Interface	X	X
Frame Relay Router ForeSight	X	X
Frame Relay Show and Debug Command Enhancement	X	X
Frame Relay SVC Support (DTE)		X
Frame Relay Switched Virtual Circuits (SVC) over ISDN	X	X
Frame Relay Switching	X	X
Frame Relay Switching Diagnostics and Troubleshooting	X	X
Frame Relay Switching Enhancements: Shaping and Policing	X	X
Frame Relay Traffic Shaping (FRTS)	X	X
Frame Relay Tunnel Switching		X
Frame Relay Voice Adaptive Traffic Shaping	X	X
Framed-Route in RADIUS Accounting	X	X
FRF.20 support	X	X
FTP Support for Downloading Software Images	X	X
G.SHDSL Symmetric DSL Support	X	X
Gateway Load Balancing Protocol (GLBP)	X	X
Generic Routing Encapsulation (GRE)	X	X
Generic Routing Encapsulation (GRE) Tunnel Keepalive	X	X

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Generic Traffic Shaping (GTS)	X	X
GLBP MD5 Authentication	X	X
Granular Protocol Inspection		X
GRE Tunnel IP Source and Destination VRF Membership	X	X
Group Scheduler Enhancement		X
Half bridge/half router for CPP and PPP	X	X
HSRP - Hot Standby Router Protocol	X	X
HSRP - Hot Standby Router Protocol and IPSec	X	X
HSRP MD5 Authentication	X	X
HSRP over ISL	X	X
HSRP support for ICMP Redirects	X	X
HSRP support for MPLS VPNs	X	X
HTTP 1.1 Web Client	X	X
HTTP 1.1 Web Server	X	X
HTTP Inspection Engine		X
HTTP Security	X	X
HTTP Server - Enabling of Applications	X	X
HTTPS - HTTP with SSL 3.0	X	X
iBGP Multipath Load Sharing		X
ICMP Unreachable Rate Limiting User Feedback	X	X
IDS Support of Security Device Event Exchange (SDEE)		X
IEEE 802.11 Wireless Standards Support	X	X
IEEE 802.11a Support	X	X
IEEE 802.11b Support	X	X
IEEE 802.11d World Mode Support	X	X
IEEE 802.11g Support	X	X
IEEE 802.1p Support	X	X
IEEE 802.1Q ISL VLAN Mapping	X	X
IEEE 802.1Q Tunneling	X	X
IEEE 802.1Q VLAN Support	X	X
IEEE 802.1Q VLAN Trunking	X	X
IEEE 802.1x - VPN Access Control	X	X
IEEE 802.1x Authenticator	X	X
IEEE 802.1x Supplicant	X	X

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IEEE 802.1x Supplicant Support for EAP-FAST	X	X
IEEE 802.3x Flow Control	X	X
IGMP Fast Leave	X	X
IGMP MIB Support Enhancements for SNMP	X	X
IGMP Snooping	X	X
IGMP State Limit	X	X
IGMP Version 2	X	X
IGMP Version 3	X	X
IGMP Version 3 - Explicit Tracking of Hosts, Groups, and Channels	X	X
Ignore revocation check and expired certs based on CERT ACL	X	X
IKE - Initiate Aggressive Mode		X
IKE Extended Authentication (Xauth)		X
IKE Mode Configuration		X
IKE Security Protocol		X
IKE Shared Secret Using AAA Server		X
Image Verification	X	X
Import of RSA keypair in PEM format	X	X
Inline Power Auto Negotiation	X	X
Integrated IS-IS Global Default Metric		X
Integrated IS-IS Point to Point Adjacency over Broadcast Media		X
Integrated IS-IS Protocol Shutdown Support Maintaining Configuration Parameters		X
Integrated routing and bridging (IRB)	X	X
Interface Alias Long Name Support	X	X
Interface Index Display	X	X
Interface Index Persistence	X	X
Interface Range Specification	X	X
Intrusion Prevention System		X
Invalid Special Parameter Index (SPI) Recovery		X
IOS Certificate Server (CS) Split Database	X	X
IP DSCP marking for Frame-Relay PVC	X	X
IP Enhanced IGRP Route Authentication	X	X
IP Event Dampening	X	X
IP Multicast Load Splitting across Equal-Cost Paths	X	X
IP Multicast Multilayer Switching (MMLS)	X	X

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IP Multilayer Switching (IP MLS)		X
IP Named Access Control List	X	X
IP over CLNS tunnel		X
IP Overlapping Address Pools (AOP)	X	X
IP Precedence Accounting	X	X
IP Precedence for GRE Tunnels	X	X
IP Routing	X	X
IP SLAs - Application Performance Monitor (APM)		X
IP SLAs - ATM Interfaces		X
IP SLAs - ATM/Frame-Relay Thresholds		X
IP SLAs - DHCP Operation		X
IP SLAs - Distribution of Statistics		X
IP SLAs - DLSW+ Operation		X
IP SLAs - DNS Operation		X
IP SLAs - Frame Relay Interfaces		X
IP SLAs - Frame Relay Operation		X
IP SLAs - FTP Operation		X
IP SLAs - History Statistics		X
IP SLAs - HTTP Operation		X
IP SLAs - ICMP Echo Operation		X
IP SLAs - ICMP Jitter Operation		X
IP SLAs - ICMP Path Echo Operation		X
IP SLAs - MPLS VPN Awareness		X
IP SLAs - Multi Operation Scheduler		X
IP SLAs - One Way Measurement		X
IP SLAs - Path Jitter Operation		X
IP SLAs - Reaction Threshold	X	X
IP SLAs - Scheduler	X	X
IP SLAs - SNA LU2 Echo	X	X
IP SLAs - SNMP Support		X
IP SLAs - TCP Connect Operation	X	X
IP SLAs - UDP Based VoIP Operation		X
IP SLAs - UDP Echo Operation	X	X
IP SLAs - UDP Jitter Operation	X	X

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IP SLAs - VoIP Threshold Traps		X
IP SLAs Additional Threshold Traps		X
IP SLAs Random Scheduler		X
IP Source Tracker	X	X
IP Summary Address for RIPv2	X	X
IP to ATM CoS, per-VC WFQ and CBWFQ	X	X
IP Traffic Export	X	X
IPHC Profiles	X	X
IPSec and Quality of Service		X
IPSec Anti-Replay Window: Expanding and Disabling		X
IPSec Dead Peer Detection (DPD) Periodic Message Option		X
IPSec MIB Support for Cisco IPSec VPN Management		X
IPsec NAT Transparency		X
IPSec Network Security		X
IPSEC Preferred Peer		X
IPSec Through Network Address Translation Support	X	X
IPSec Triple DES Encryption (3DES)		X
IPsec Virtual Tunnel Interface		X
IPSec VPN Accounting		X
IPSec VPN High Availability Enhancements		X
IPSec VTI - Virtual Tunnel Interface		X
ISDN	X	X
ISDN Advice of Charge (AOC)	X	X
ISDN BCAC and Round-Robin Channel Selection Enhancements	X	X
ISDN Caller ID Callback	X	X
ISDN Cause Code Override	X	X
ISDN Generic Transparency Descriptor (GTD) for Setup Message	X	X
ISDN LAPB-TA	X	X
ISDN Leased Line at 128kbps	X	X
ISDN Network Side for ETSI Net5 PRI	X	X
ISDN NFAS	X	X
ISDN PRI support for Integrated SLT	X	X
ISDN TON to Radius server	X	X
ISDN-NFAS with D Channel Backup	X	X

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IS-IS		X
IS-IS Caching of Redistributed Routes		X
IS-IS HMAC-MD5 Authentication		X
IS-IS Incremental Shortest Path First (i-SPF) Support		X
IS-IS Limit on Number of Redistributed Routes		X
IS-IS Mechanism to Exclude Connected IP Prefix from LSP Advertisements		X
IS-IS Multiarea Support		X
IS-IS Support for IP Route Tags		X
IS-IS Support for Priority-Driven IP Prefix RIB Installation		X
ISL VLAN	X	X
ISO CLNS		X
Jumbo Frames	X	X
Kerberos V client support		X
Key Rollover for Certificate Renewal	X	X
L2TP - IPSEC Support for NAT and PAT Windows Clients	X	X
L2TP - Large Scale Dial-Out per user attribute via AAA	X	X
L2TP Client Initiated Tunneling	X	X
L2TP Dial-Out	X	X
L2TP Dial-Out Load Balancing & Redundancy	X	X
L2TP Extended Failover	X	X
L2TP Layer 2 Tunneling Protocol	X	X
L2TP Redirect	X	X
L2TP Security	X	X
L2TP Tunnel Connection Speed Labeling	X	X
L2TP Tunnel Preservation of IP TOS	X	X
Large Scale Dial Out (LSDO) VRF Aware	X	X
Large Scale Dialout (LSDO)		X
Layer 2 Forwarding-Fast Switching	X	X
Line Printer Daemon (LPD)	X	X
Link Fragmentation and Interleaving (LFI) for Frame Relay and ATM Virtual Circuits	X	X
Loadsharing IP packets over more than six parallel paths	X	X
Local Proxy ARP	X	X
Lock and Key	X	X
Low Latency Queueing (LLQ)	X	X

CISCO IOS VERSION 12.4(9)T2	BASE IP	ADVANCED SECURITY
Low Latency Queueing (LLQ) for Frame Relay	X	X
Low Latency Queueing (LLQ) with Priority Percentage Support	X	X
LSDO: L2TP Large-Scale Dial-Out	X	X
MAC Address Filtering	X	X
MAC Address Local Authentication	X	X
Management Plane Protection		X
Manual certificate enrollment (TFTP and cut-and-paste)	X	X
MD5 File Validation	X	X
Memory Leak Detector	X	X
Memory Traceback Recording	X	X
Message Banners for AAA Authentication	X	X
MGCP Layer 2 Teardown for IUA DPNSS Trunks	X	X
Microsoft Point-to-Point Compression (MPPC)	X	X
MLPPP - Multilink PPP	X	X
MLPPP Bundling - DSL Interfaces	X	X
MLPPP Enable/Disable via Radius for Preauthentication User	X	X
MLPPP Minimum Links Mandatory	X	X
Modem Calls over QSIG	X	X
Modem over BRI	X	X
Modem Script and System Script Support in LSDO	X	X
Modem User Interface Option	X	X
Modular QoS CLI (MQC)	X	X
Modular QoS CLI (MQC) - Based Frame Relay Traffic Shaping	X	X
Modular QoS CLI (MQC) Three-Level Hierarchical Policer	X	X
Modular QoS CLI (MQC) Unconditional Packet Discard	X	X
Monitoring Control Characters on Async Lines	X	X
MPLS VPN VRF Selection using Policy Based Routing	X	X
MS Callback	X	X
MS-CHAP Version 1	X	X
MS-CHAP Version 2	X	X
MSDP compliance with IETF RFC 3618	X	X
MSDP MD5 password authentication	X	X
MTree crypto data structure optimizations		X
Multicast BGP (MBGP)		X

CISCO IOS VERSION 12.4(9)T2	BASE IP	ADVANCED SECURITY
Multicast Fast Switching Performance Improvement	X	X
Multicast NAT	X	X
Multicast Routing Monitor (MRM)	X	X
Multicast Source Discovery Protocol (MSDP)		X
Multicast Subsecond Convergence	X	X
Multicast-VPN: Multicast Support for MPLS VPN	X	X
Multichassis MultiLink PPP (MMP)		X
Multiclass Multilink PPP	X	X
Multihop VPDN	X	X
Multilink Frame Relay (FRF.16.1) - Variable Bandwidth Class	X	X
Multi-pad support for X.25 connections	X	X
Multiple RSA Keypair Support	X	X
Multiple SSIDs	X	X
Multi-protocol BGP (MP-BGP) - MPLS VPN		X
Multiprotocol BGP (MP-BGP) Support for CLNS		X
Multi-VRF Support (VRF lite)	X	X
NAC - Agentless Host Support		X
NAC - Network Admission Control		X
Named Method Lists for AAA Authorization and Accounting	X	X
NAT - Ability to use Routes Maps with Static Translations	X	X
NAT - Default Inside Server Enhancement	X	X
NAT - Enhanced H.225/H.245 Forwarding Engine	X	X
NAT - Network Address Translation	X	X
NAT - Optimized SIP Media Path with SDP	X	X
NAT - Optimized SIP Media Path without SDP	X	X
NAT - Performance & Scalability enhancement - Timer Wheel	X	X
NAT - Performance Enhancement - CEF Switching Support	X	X
NAT - Rate Limiting NAT Translation	X	X
NAT - Stateful Fail-Over - Asymmetric Outside-to-Inside Support	X	X
NAT - Stateful Fail-over for Embedded Addressing	X	X
NAT - Stateful Fail-over of Network Address Translation (SNAT) Phase 1	X	X
NAT - Static IP Support	X	X
NAT - Static Mapping Support with HSRP for High-Availability	X	X
NAT - Support for H.323 Fragmented Control Messages	X	X

CISCO IOS VERSION 12.4(9)T2	BASE IP	ADVANCED SECURITY
NAT - Support for H.323v3 and v4 in v2 Compatibility mode	X	X
NAT - Support for NetMeeting Directory (Internet Locator Service - ILS)	X	X
NAT - Support for SIP	X	X
NAT - Support of H.323v2 Call Signaling (FastConnect)	X	X
NAT - Support of H.323v2 RAS	X	X
NAT - Support of IP Phone to Cisco Call Manager	X	X
NAT - Translation of external IP Addresses only	X	X
NAT - VRF Aware NAT	X	X
NAT as SIP-Session Border Controller Hosted NAT Traversal	X	X
NAT as SIP-Session Border Controller Media Flow	X	X
NAT as SIP-Session Border Controller Support for Address-Only Fields	X	X
National ISDN Switch Types for BRI and PRI Interfaces	X	X
NAT-Support of IP Phone to Cisco Call Manager	X	X
NBAR - Citrix ICA Published Applications	X	X
NBAR - Multiple Matches Per Port	X	X
NBAR - Network-based Application Recognition	X	X
NBAR- BitTorrent PDLM	X	X
NBAR Extended Inspection for HTTP Traffic	X	X
NBAR PDLM Versioning	X	X
NBAR Real-time Transport Protocol Payload Classification	X	X
NBAR User-Defined Custom Application Classification	X	X
NBAR-NAT Integration & RTSP	X	X
NetBEUI over PPP (NBFCP)		X
NETCONF over BEEP	X	X
NETCONF over SSHv2	X	X
NetFlow	X	X
NetFlow Aggregation	X	X
NetFlow Dynamic Top Talkers CLI	X	X
Netflow Egress Accounting	X	X
NetFlow Input Filters	X	X
NetFlow Layer 2 and Security Monitoring Exports	X	X
Netflow Multicast Support	X	X
Netflow Multiple Export Destinations	X	X
NetFlow Policy Routing (NPR)	X	X

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	BASE IP	ADVANCED SECURITY
NetFlow Subinterface Support	X	X
NetFlow ToS-Based Router Aggregation	X	X
NetFlow v9 Export Format	X	X
Network Analysis Module (NAM)	X	X
Network Side ISDN PRI Signaling, Trunking, and Switching	X	X
Network Time Protocol (NTP)	X	X
Next Hop Resolution Protocol (NHRP)	X	X
Next Hop Resolution Protocol (NHRP) - CEF rewrite for DMVPN Networks	X	X
NSF Awareness - BGP		X
NSF Awareness - EIGRP	X	X
NSF Awareness - IS-IS		X
NSF Awareness - OSPF	X	X
NSF Awareness - OSPF (RFC 3623 OSPF Graceful Restart Helper Mode)	X	X
NSF Awareness (Nonstop Forwarding Awareness)		X
OCSP - Server Certification from Alternate Hierarchy	X	X
OCSP (Online Certificate Status Protocol)	X	X
OER - Inbound Optimization thru BGP		X
OER - Voice Traffic Optimization		X
OER Application-Aware Routing: PBR		X
OER Port and Protocol Based Prefix Learning		X
OER VPN IPsec/GRE Tunnel Optimization		X
Offload Server Accounting Enhancement	X	X
On Demand Routing (ODR)	X	X
Optimized Edge Routing (OER)		X
Optimized PPP Negotiation	X	X
Option to Disable Hardware Crypto Engine Failover to Software Crypto Engine		X
Optional OCSP Nonce	X	X
OSPF	X	X
OSPF ABR type 3 LSA Filtering	X	X
OSPF Area Transit Capability	X	X
OSPF Flooding Reduction	X	X
OSPF Forwarding Address Suppression in Translated Type-5 LSAs	X	X
OSPF Inbound Filtering using Route Maps with a Distribute List	X	X
OSPF Incremental Shortest Path First (i-SPF) Support	X	X

CISCO IOS VERSION 12.4(9)T2	BASE IP	ADVANCED SECURITY
OSPF Limit on Number of Redistributed Routes	X	X
OSPF Link State Database Overload Protection	X	X
OSPF Link-local Signaling (LLS) Per Interface Basis	X	X
OSPF MIB Support of RFC 1850 and Latest Extensions	X	X
OSPF Not-So-Stubby Areas (NSSA)	X	X
OSPF On Demand Circuit (RFC 1793)	X	X
OSPF Packet Pacing	X	X
OSPF Sham-Link Support for MPLS VPN	X	X
OSPF Shortest Paths First Throttling	X	X
OSPF Stub Router Advertisement	X	X
OSPF Support for Fast Hellos	X	X
OSPF Support for Link State Advertisement (LSA) Throttling	X	X
OSPF Support for Multi-VRF on CE Routers	X	X
OSPF Support for Unlimited Software VRFs per Provider Edge (PE) Router	X	X
OSPF Update Packet-Pacing Configurable Timers	X	X
P2P Application Inspection and Control - Phase 1		X
Packet Classification Based on Layer3 Packet-Length	X	X
Packet Classification using Frame-Relay DLCI Number	X	X
PAD Subaddress Formatting Option	X	X
PAD Subaddressing	X	X
Parse Bookmarks	X	X
Parser Cache	X	X
Password Authentication Protocol (PAP)	X	X
PBR Support for Multiple Tracking Options	X	X
Peer Pool Backup Support	X	X
Per VRF AAA	X	X
Percentage-Based Policing and Shaping	X	X
Performance Enhancements for IOS ACL	X	X
Persistent Self-Signed Certificates	X	X
Per-User Configuration	X	X
Per-User QoS via AAA Policy Name	X	X
PGM Host		X
PIM Dense Mode State Refresh	X	X
PIM MIB Extension for IP Multicast	X	X

CISCO IOS VERSION 12.4(9)T2	BASE IP	ADVANCED SECURITY
PIM Multicast Scalability	X	X
PIM Version 1	X	X
PIM Version 2	X	X
PKI AAA Authorization Using the Entire Subject Name	X	X
PKI Integration with AAA Server	X	X
Policer Enhancement - Multiple Actions	X	X
Policy Based Routing: Recursive Next Hop	X	X
Policy-Based Routing (PBR)	X	X
Port to Application Mapping (PAM)		X
PPP	X	X
PPP MLP MRRU negotiation configuration	X	X
PPP over ATM	X	X
PPP over ATM (IETF-Compliant)	X	X
PPP over ATM SVCs	X	X
PPP Over Fast Ethernet 802.1Q	X	X
PPP over Frame Relay	X	X
PPPoA/PPPoE autosense for ATM PVCs	X	X
PPPoE Client	X	X
PPPoE Client DDR Idle-Timer	X	X
PPPoE Connection Throttling		X
PPPoE MTU Adjustment	X	X
PPPoE on Ethernet	X	X
PPPoE over VLANs Scaling and PPPoE over VLANs forwarding over PVC		X
PPPoE Radius Port Identification	X	X
PPPoE Relay	X	X
PPPoE Server Restructuring and PPPoE Profiles	X	X
PPPoE Service Selection		X
PPPoE Session limit	X	X
PPPoE Session Limit per NAS port	X	X
PPPoE Session Recovery After Reload		X
PPTP with MPPE		X
Pragmatic General Multicast (PGM)		X
Preauthentication with ISDN PRI and Channel-Associated Signalling Enhancements	X	X
Pre-fragmentation For Ipsec VPNs	X	X

CISCO IOS VERSION 12.4(9)T2	BASE IP	ADVANCED SECURITY
PRI/Q.931 Signaling Backhaul for Call Agent Applications	X	X
Priority Queueing (PQ)	X	X
Privilege Command Enhancement	X	X
Protected Private Key Storage	X	X
Protocol Translation (PT)	X	X
Protocol Translation Ruleset	X	X
QoS Bandwidth Estimation	X	X
QoS Device Manager (QDM)	X	X
QoS for Virtual Private Networks	X	X
QoS Packet Marking	X	X
QoS Policy Propagation via Border Gateway Protocol (QPPB)		X
QoS Priority Percentage CLI Support	X	X
QOS: DirectConnect PDLM	X	X
QoS: Skype classification	X	X
Quality of Service (QoS) - Classification Only	X	X
Quality of Service (QoS) Queuing	X	X
Query Mode Definition Per Trustpoint	X	X
Query Multiple Servers during Certificate Revocation Check	X	X
Radio Management Aggregation		X
RADIUS	X	X
RADIUS Attribute 104	X	X
RADIUS Attribute 44 (Accounting Session ID) in Access Requests	X	X
RADIUS attribute 5 (NAS-Port) format specified on a per-server group level	X	X
RADIUS Attribute 52 and 53 Gigaword Support	X	X
RADIUS Attribute 66 (Tunnel-Client-Endpoint) Enhancements	X	X
RADIUS Attribute 77 for DSL	X	X
RADIUS Attribute 82: Tunnel Assignment Id	X	X
RADIUS Attribute 91 Encrypted and Tagged VSA Support	X	X
RADIUS Attribute Value Screening	X	X
RADIUS Centralized Filter Management	X	X
RADIUS EAP Support	X	X
RADIUS for Multiple User Datagram Protocol Ports	X	X
RADIUS Logical Line ID	X	X
RADIUS NAS-IP-Address Configurability	X	X

CISCO IOS VERSION 12.4(9)T2	BASE IP	ADVANCED SECURITY
RADIUS Progress Codes	X	X
RADIUS Route Download	X	X
RADIUS Server per SSID	X	X
RADIUS Server Reorder on Fail	X	X
RADIUS Timeout set during Pre-Authentication	X	X
RADIUS Tunnel Attribute Extensions	X	X
RADIUS Tunnel Preference for Load Balancing and Fail-over	X	X
RADIUS VC Logging	X	X
Random Early Detection (RED)	X	X
Random Sampled NetFlow	X	X
Rate Queues for SVCs per sub-interface		X
Rate-Limiting Inspected Traffic		X
RBE Client Side Encapsulation with QoS	X	X
Real-time Resolution for IPsec Tunnel Peer		X
Redial Enhancements	X	X
Re-Enroll Using Existing Certificate	X	X
Reflexive Access Lists	X	X
Reliable Static Routing Back-up using Object Tracking		X
Remote Monitoring MIB Update	X	X
Resource Pool Management with Direct Remote Services	X	X
Response Time Reporter (RTR)		X
Response Time Reporter (RTR) enhancements		X
Reverse Path Forwarding - Source Exists only	X	X
Reverse Route Injection (RRI)	X	X
Reverse SSH Enhancements	X	X
RFC 1483 for Token Ring Networks		X
RFC 2576: SNMP v1/ v2c pdu conversions for proxy forwarder	X	
RFC-2867 Tunnel Accounting	X	X
RGMP - Router-Port Group Management Protocol	X	X
RIP	X	X
RIPv2: RFC 1724 MIB Extension	X	X
RMON events and alarms	X	X
RMON full	X	X
Rotating Through Dial Strings	X	X

CISCO IOS VERSION 12.4(9)T2	BASE IP	ADVANCED SECURITY
RSVP - Resource Reservation Protocol	X	X
RSVP Application ID Support	X	X
RSVP Local Policy Support	X	X
RSVP Message Authentication	X	X
RSVP Refresh Reduction and Reliable Messaging	X	X
RSVP Scalability Enhancements	X	X
RSVP Support for Frame Relay	X	X
RSVP support for LLQ	X	X
RSVP Support for RTP Header Compression	X	X
RTP Header Compression	X	X
RTP Header Compression over Satellite Links	X	X
SDP (Secure Device Provisioning) Start Page		X
SEAL Encryption	X	X
Secure Copy (SCP)	X	X
Secure Shell SSH Terminal-line access	X	X
Secure Shell SSH Version 1 Integrated Client	X	X
Secure Shell SSH Version 1 Server Support	X	X
Secure Shell SSH Version 2 Client Support	X	X
Secure Shell SSH Version 2 Server Support	X	X
Security Device Manager (SDM)	X	X
Selective Packet Discard (SPD)	X	X
Selective Virtual-Access Interface Creation	X	X
Session Limit Per VRF	X	X
SHDSL - Auto Detection of 2 Wire Versus 4 Wire Line Mode	X	X
Shell-Based Authentication of VPDN Users	X	X
Show Command Redirect	X	X
Silent Operation Mode	X	X
Simple Network Time Protocol (SNTP)	X	X
Simple Network-enabled Auto Provisioning (SNAP)	X	X
Single Rate 3-Color Marker for Traffic Policing	X	X
Snapshot routing	X	X
SNMP (Simple Network Management Protocol)	X	X
SNMP Inform Request	X	
SNMP Manager	X	

CISCO IOS VERSION 12.4(9)T2	BASE IP	ADVANCED SECURITY
SNMP Support for IOS vLAN Subinterfaces	X	X
SNMP Support for Named Access Lists	X	X
SNMP Support for vLAN (ISL, DOT1Q) Subinterfaces	X	X
SNMP Support over VPN	X	X
SNMP Support over VPNs - Context Based Access Control	X	X
SNMPv2C	X	X
SNMPv3 - 3DES and AES Encryption Support	X	X
SNMPv3 (SNMP Version 3)	X	X
Source Interface Selection for Outgoing Traffic with Certificate Authority (CA)	X	X
Source Specific Multicast (SSM)	X	X
Source Specific Multicast (SSM) - IGMPv3,IGMP v3lite, and URD	X	X
Source Specific Multicast (SSM) Mapping	X	X
Spanning Tree Protocol (STP)	X	X
Spanning Tree Protocol (STP) - Backbone Fast Convergence	X	X
Spanning Tree Protocol (STP) - Loop Guard	X	X
Spanning Tree Protocol (STP) - Portfast	X	X
Spanning Tree Protocol (STP) - Portfast BPDU Guard	X	X
Spanning Tree Protocol (STP) - Uplink Fast Convergence	X	X
Spanning Tree Protocol (STP) - Uplink Load Balancing	X	X
Spanning Tree Protocol (STP) Extension	X	X
SRB - Source-Route bridging		X
SSG RADIUS VC Logging Enhancement	X	X
SSL VPN - WebVPN Enhancements		X
Stack Group Bidding Protocol (SGBP)		X
Standard IP Access List Logging	X	X
Stream Control Transmission Protocol (SCTP)	X	X
Stub IP Multicast Routing	X	X
Subnetwork Bandwidth Manager (SBM)	X	X
Subordinate/RA Mode IOS Certificate Server (CS) Rollover	X	X
Subscriber Service Switch	X	X
Support for IUA with SCTP for Cisco Access Servers	X	X
Switch Port Analyzer (SPAN)	X	X
Switch Port Analyzer (SPAN) - Disable Receive Traffic Destination Port	X	X
Switch Port Analyzer (SPAN) - Multiple Source Port Selection	X	X

CISCO IOS VERSION 12.4(9)T2	BASE IP	ADVANCED SECURITY
Switched Multimegabit Data Service (SMDS)	X	X
T1/E1 Mode for Two-Wire SHDSL	X	X
Tacacs SENDAUTH function	X	X
Tacacs Single Connection	X	X
TACACS+	X	X
TACACS+ Per VRF	X	X
TCL scripting		X
TCP - Explicit Congestion Notification	X	X
TCP - TCP Congestion Avoidance	X	X
TCP Show Extension	X	X
TCP Window Scaling	X	X
Threat Information Distribution Protocol (TIDP)		X
TIDP - Based Mitigation Services		X
Time-Based Access Lists Using Time Ranges	X	X
Timer and Retry Enhancements for L2TP and L2F	X	X
Transmit Power Control (TPC)	X	X
Transparent Bridging	X	X
Transparent IOS Firewall		X
Transparent IPS		X
Triggered RIP	X	X
Trimble Palisade NTP Synchronization Driver	X	X
Trusted Root Certification Authority	X	X
Trustpoint CLI	X	X
Tunable Tx-Ring buffer-DSL interfaces	X	X
Tunnel Authentication via Radius on LNS	X	X
Tunnel Endpoint Discovery		X
Tunnel Type of Service (TOS)	X	X
Turbo Flooding of UDP Datagrams	X	X
Two-Rate Policer	X	X
UDI - Unique Device Identifier	X	X
UDLR Tunnel ARP and IGMP Proxy	X	X
UDP forwarding support of IP Redundancy Virtual Router Group (VRG)	X	X
Unicast Reverse Path Forwarding (uRPF)	X	X
Uni-Directional Link Routing (UDLR)	X	X

CISCO IOS VERSION 12.4(9)T2	BASE IP	ADVANCED SECURITY
Unity Express Voice Mail and Auto Attendant on AIM	X	X
USB Storage	X	X
USB Storage PKI Enhancements	X	X
User Maximum Links	X	X
Using 31-bit Prefixes on IPv4 Point-to-Point Links	X	X
V.110 support for Digital Modems	X	X
V.120 Support	X	X
V.92 Modem on Hold	X	X
Vendor-Specific RADIUS Attributes	X	X
Virtual Fragmentation Reassembly	X	X
Virtual Interface Template Service	X	X
Virtual Private Dial-up Network (VPDN)	X	X
Virtual Profile CEF Switched	X	X
Virtual Profiles	X	X
Virtual Router Redundancy Protocol (VRRP)	X	X
Virtual Templates for Protocol Translation		X
VLAN Range	X	X
VLANs over IP Unnumbered Sub-Interfaces	X	X
VoIP Gateway Trunk and Carrier Based Routing Enhancements	X	X
VPDN Default Group Template	X	X
VPDN Group Session Limiting	X	X
VPDN Multihop by DNIS	X	X
VPN Routing Forwarding (VRF) Framed Route (Pool) Assignment via PPP	X	X
VPN Tunnel Management	X	X
VRF Aware Cisco IOS Firewall		X
VRF Aware Dialer Watch	X	X
VRF aware IPsec		X
VRF-Aware VPDN Tunnels	X	X
VRRP MD5 Authentication	X	X
WCCP Redirection on Inbound Interfaces	X	X
WCCP Version 1	X	X
WCCP Version 2	X	X
WebVPN		X
WebVPN Auto Applet Download		X

CISCO IOS VERSION 12.4(9)T2	BASE IP	ADVANCED SECURITY
WebVPN NTLM Authentication		X
WebVPN RADIUS Accounting		X
Weighted Fair Queueing (WFQ)	X	X
Weighted RED (WRED)	X	X
Wi-Fi Protected Access (WPA)	X	X
Wildcard Pre-Shared Key		X
World Mode	X	X
WRED Enhancement - Explicit Congestion Notification (ECN)	X	X
x Digital Subscriber Line (xDSL) Bridge Support	X	X
X.25	X	X
X.25 Annex G Session Status Change Reporting	X	X
X.25 Call Confirm Packet Address Control	X	X
X.25 Calling Address Insertion and Removal Based on Input Interface	X	X
X.25 Closed User Group	X	X
X.25 Data Display Trace	X	X
X.25 Dual Serial Line Management	X	X
X.25 Failover	X	X
X.25 Load Balancing	X	X
X.25 on ISDN D-Channel	X	X
X.25 over Frame Relay (Annex G)	X	X
X.25 over TCP (XOT)	X	X
X.25 Over TCP Profiles	X	X
X.25 Record Boundary Preservation for Data Communications Networks	X	X
X.25 Remote Failure Detection	X	X
X.25 Station Type For ISDN D-Channel Interface	X	X
X.25 Suppression of Security Signaling Facilities	X	X
X.25 Switch Local Acknowledgement	X	X
X.25 Switching between PVCs and SVCs	X	X
X.25 Terminal Line Security for PAD Connections	X	X
X.28 Emulation	X	X
Zone-Based Policy Firewall		X