CISCO   Cisco Feature Navigator

Search by Feature   Search by Software   Compare Images

Objective: Define a specific software image in order to view its supported features.

Select from the pull down menus to find releases which support particular platform and feature set combinations. View your results in the table below and repeat as necessary to define a specific software image.

Your Selections:

Software	**IOS**
Major Release	**12.2SRD**
Release	12.2(33)SRD
Platform	7200
Feature Set/License	SP SERVICES

New Search

Search Results

Image Info

Image Name	c7200-spservicesk9-mz.122-33.SRD.bin
DRAM / Min Flash	128 / 64
Enterprise Product Number	S72SPSK9-12233SRD

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Features

256+ VLANS

6PE Multipath

8-Way CEF Load Balancing

802.1p CoS - PPP & PPPoE Control Frames

AAA Authorization and Authentication Cache

AAA Broadcast Accounting

AAA CLI Stop Record Enhancement

AAA DNIS Map for Authorization

AAA Double Authentication Secured by Absolute Timeout

AAA High Availability Support for Local PPPoX Sessions

AAA Per-User Scalability

AAA Resource Accounting

AAA Server Group

AAA Server Group Deadtimer

AAA Server Group Enhancements

AAA Server Groups Based on DNIS

ACL - Improved Merging Algorithm

ACL - Named ACL Support for Noncontiguous Ports on an Access Control Entry

ACL - Reflexive Access Lists

ACL Sequence Numbering

Additional Vendor-Proprietary RADIUS Attributes

Address Resolution Protocol (ARP)

Always On Dynamic ISDN (AO/DI)

Answer Supervision Reporting

Any Transport over MPLS (AToM) - Psuedowire Provisioning

Any Transport over MPLS (AToM): Ethernet over MPLS: Port Mode (EoMPLS)

Any Transport over MPLS (AToM): ATM Cell Relay over MPLS: Packed Cell Relay

Any Transport over MPLS (AToM): ATM Cell Relay over MPLS: VP Mode

Any Transport over MPLS (AToM): Ethernet over MPLS (EoMPLS)

Any Transport over MPLS (AToM): Frame Relay over MPLS (FRoMPLS)

Any Transport over MPLS (AToM): Graceful Restart

Any Transport over MPLS (AToM): HDLC over MPLS (HDLCoMPLS)

Any Transport over MPLS (AToM): Port Mode Cell Relay Support

Any Transport over MPLS (AToM): PPP over MPLS (PPPoMPLS)

Any Transport over MPLS (AToM): Single Cell Relay - VC Mode (CRoMPLS)

Any Transport over MPLS (AToM): Tunnel Selection

Area Command in Interface Mode for OSPFv2

ARP Optimization

Asynchronous Rotary Line Queuing

Asynchronous Serial Traffic Over UDP (aka UDPTN)

ATM AAL5 OAM Emulation over L2TPv3

ATM ARP Client

ATM ARP Server

ATM Cell Loss Priority (CLP) Setting

ATM LANE Fast Simple Server Redundancy Protocol (LANE Fast SSRP)

ATM OAM Ping

ATM Port Mode Cell Relay over L2TPv3

ATM Port Mode Packed Cell Relay over MPLS

ATM PVC Range and Routed Bridge Encapsulation Subinterface Grouping

ATM PVC Trap Enhancements for Segment and End AIS/RDI failures

ATM PVC Trap Support

ATM Routed Bridge Encapsulation (RBE)

ATM Single Cell Relay (VC Mode) over L2TPv3

ATM VC Bundling

ATM VP Mode Single Cell Relay over L2TPv3

ATM-DXI

AToM over GRE

Attribute Filtering Per-Domain and VRF Aware Framed-Routes

Attribute Screening For Access Requests

AutoInstall Using DHCP for LAN Interfaces

Automatic modem configuration

Automatic Protection Switching (APS)

AutoRP Enhancement

AutoSecure

Bandwidth-Based Call Admission Control (CAC) for IP Multicast

BFD - Static Route Support

BFD - VRF Support

BFD Echo Mode

BFD version 1 support

BGP

BGP 4

BGP 4 Multipath Support

BGP 4 Prefix Filter and In-bound Route Maps

BGP 4 Soft Config

BGP Conditional Route Injection

BGP Configuration Using Peer Templates

BGP Convergence Optimization

BGP Cost Community

BGP Cost Community Support for EIGRP MPLS VPN PE-CE

BGP Dynamic Update Peer-Groups

BGP Hide Local-Autonomous System

BGP Hybrid CLI Support

BGP Increased Support of Numbered as-path Access Lists to 500

BGP Link Bandwidth

BGP Multicast Inter-AS (IAS) VPN

BGP Multipath Load Sharing for Both eBGP and iBGP in an MPLS-VPN

BGP Named Community Lists

BGP Neighbor Policy

BGP Next Hop Propagation

BGP Per Neighbor Graceful Restart Configuration

BGP Per Neighbor SOO Configuration

BGP Policy Accounting

BGP Prefix-Based Outbound Route Filtering

BGP Reduction in Transient Memory Usage

BGP Restart Neighbor Session After max-prefix Limit Reached

BGP Route-Map Continue

BGP Route-Map Continue Support for Outbound Policy

BGP Route-Map Policy List Support

BGP Selective Address Tracking

BGP Soft Reset

BGP Support for BFD

BGP Support for Dual AS Configuration for Network AS Migrations

BGP Support for Fast Peering Session Deactivation

BGP Support for IP Prefix Import from Global Table into a VRF Table

BGP Support for MTR

BGP Support for Named Extended Community Lists

BGP Support for Next-Hop Address Tracking

BGP Support for Sequenced Entries in Extended Community Lists

BGP Support for TCP Path MTU Discovery per Session

BGP Support for TTL Security Check

Bidirectional Forwarding Detection (BFD) Standard Implementation

Bidirectional PIM

Bisync support for synchronous serial port adapters

Bridge Control Protocol (BCP)

Bridge Control Protocol (BCP) Quality of Service (QoS)

Bridging between IEEE 802.1Q vLANs

Call Admission Control for IKE

Caller ID

CDP (Cisco Discovery Protocol) Version 2

CEF Support for IP Routing between IEEE 802.1Q vLANs

CEF Switching for Routed Bridge Encapsulation

CEF/dCEF - Cisco Express Forwarding

CEFv6/dCEFv6 - Cisco Express Forwarding

Certificate - Auto Enrollment

Certificate - Security Attribute-Based Access Control

Certificate - Storage Location Specification

Certificate - ISAKMP Profile Mapping

Certification Authority Interoperability (CA)

CGMP - Cisco Group Management Protocol

Challege Handshake Authentication Protocol (CHAP)

Channelized E1 Signaling

Cisco Frame Relay MIB enhancement

Cisco IOS Login Enhancements

CISCO-IP-URPF-MIB Support

Class Based Ethernet CoS Matching & Marking (802.1p & ISL CoS)

Class Based Weighted Fair Queuing (CBWFQ)

Class-Based Marking

Class-Based Policing

Class-Based Shaping

Clear IP Traffic CLI

CLI String Search

CNS

CNS - Configuration Agent

CNS - Event Agent

CNS - Image Agent

CNS - Interactive CLI

CNS Config Retrieve Enhancement with Retry and Interval

Command Scheduler (Kron)

Command Scheduler (Kron) Policy for System Startup

Commented IP Access List Entries

Committed Access Rate (CAR)

Config Logger Persistency

Configurable MAC Address for PPPoE

Configurable per ATM-VC Hold Queue size

Configurable Timers in H.225

Configuration Change Notification and Logging

Configuration Generation Performance Enhancement

Configuration Replace and Configuration Rollback

Configuration Rollback Confirmed Change

Configuration Versioning

Connect-Info RADIUS Attribute 77

Connection-Mode Network Service (CMNS)

Contextual Configuration Diff Utility

Control Plane DSCP Support for RSVP

Control Plane Policing (CoPP)

Control Plane Policing - Time based

COPS for RSVP

Crypto Conditional Debug Support

CT1/RBS (Robbed Bit Signaling)

CUG Selection Facility Suppress Option

Custom Queueing (CQ)

Default Passive Interface

Define Interface Policy-Map AV Pairs

DHCP - Configurable DHCP Client

DHCP - Relay Option 82 Encapsulation

DHCP - Server Multiple subnet

DHCP Accounting

DHCP Address Allocation using Option 82

DHCP Authorized ARP

DHCP Client

DHCP ODAP Server Support

DHCP On Demand Address Pool (ODAP) Manager for non-MPLS VPN pools

DHCP Per Interface Lease Limit and Statistics

DHCP Proxy Client

DHCP Relay - MPLS VPN Support

DHCP Relay Agent Support for Unnumbered Interfaces

DHCP Relay Option 82 - Per Interface Support

DHCP Relay Subscriber Identifier Suboption

DHCP Secured IP Address Assignment

DHCP Server

DHCP Server Options - Import and Autoconfiguration

Dial Backup

Dial Peer Enhancements

Dial-on-demand

Dialer Idle Timer Inbound Traffic Configuration

Dialer Profiles

Dialer Watch

DiffServ Compliant dWRED

Diffserv Compliant WRED

Disabling LANE Flush Process

Distinguished Name Based Crypto Maps

Distributed Network-based Application Recognition (dNBAR)

Distributed Traffic Shaping (dTS)

DLR Enhancements: PGM RFC-3208 Compliance

DLSw (RFC 1795)

DLSw CO features

DLSw V2

DLSw+ Asynchronous TCP Enhancements

DLSw+ Peer Group Clusters

DLSw+ RSVP Bandwidth Reservation

DLSw+ SNA Type of Service

DLSw+ Support For Transporting LLC1 UI Traffic

DMVPN - Phase 2

DNS based X.25 routing

Double Authentication

Down Stream Physical Unit (DSPU) over DLSw+

DRP Server Agent

Dual PQ (Priority Queue)

Dynamic Bandwidth Change for ATM PVCs

Dynamic Feedback Protocol (DFP)

Dynamic Multiple Encapsulation for Dial-in over ISDN

Dynamic Per VRF AAA

Dynamic Subscriber Bandwidth Selection

E1 R2 Signaling

Easy IP (Phase 1)

Easy VPN Client RSA - Signature Support

Easy VPN Phase 5.0

EasyVPN Phase 6

EasyVPN Server Enhancements

EIGRP MPLS VPN PE-CE Site of Origin (SoO)

EIGRP Stub Routing

EIGRP Support for MTR

EIGRP Support for Route Map Filtering

Embedded Event Manager (EEM) 2.0

Embedded Event Manager (EEM) 2.1

Embedded Event Manager (EEM) 2.2

Embedded Network Management Improvements

Encrypted Kerberized Telnet

Encrypted Pre-shared Key

Encrypted Vendor Specific Attributes

Enhanced ATM VC Configuration and Management

Enhanced IGRP (EIGRP)

Enhanced Local Management Interface (ELMI)

Enhanced Password Security

Enhanced Test Command

Enhanced Tracking Support

Etherchannel Guard

Exclusive Configuration Change Access

Exporting and Importing RSA Keys

Extended ACL support for IGMP to support SSM in IPv4

Extended NAS-Port-Type and NAS-Port Support

Fast-Switched Policy Routing

Fast-Switched SRTLB

FAT32 Support

Fax Relay Packet Loss Concealment

Feature Group D Support

FHRP - Enhanced Object Tracking of IP SLAs

FHRP - EOT integration with EEM

FHRP - HSRP - Hot Standby Router Protocol V2

FHRP - HSRP Group Shutdown

FHRP - HSRP Multiple Group Optimization

FHRP - Object Tracking List

Field Programmable Device Upgrade Tool

Flexible NetFlow

Flow-Based WRED

Frame Relay

Frame Relay - Multilink (MLFR-FRF.16)

Frame Relay Access Support (FRAS) Border Access Node (BAN)

Frame Relay Access Support (FRAS) Boundary Network Node (BNN)

Frame Relay Access Support (FRAS) Dial Backup over DLSW+

Frame Relay Access Support (FRAS) DLCI Backup

Frame Relay Access Support (FRAS) Host

Frame Relay ELMI Address Registration

Frame Relay Encapsulation

Frame Relay End-to-End Keepalive

Frame Relay Fragmentation (FRF.12)

Frame Relay Fragmentation with Hardware Compression

Frame Relay FRF.1.2 Annex A Support.

Frame Relay FRF.9 Payload Compression

Frame Relay PVC Interface Priority Queueing

Frame Relay Queuing and Fragmentation at the Interface

Frame Relay Router ForeSight

Frame Relay Show and Debug Command Enhancement

Frame Relay Switching

Frame Relay Switching Diagnostics and Troubleshooting

Frame Relay Switching Enhancements: Shaping and Policing

Frame Relay Traffic Shaping (FRTS)

Frame Relay Tunnel Switching

Frame Relay VC Bundling

Framed-Route in RADIUS Accounting

FRF.11 for FlexWAN Module

FTP Support for Downloading Software Images

FUNI Support for Routers

Gateway Load Balancing Protocol (GLBP)

Generic Routing Encapsulation (GRE)

Generic Routing Encapsulation (GRE) Tunnel Keepalive

Generic Routing Encapsulation Tunnel IP Source and Destination VRF Membership (PXF Based)

Generic Traffic Shaping (GTS)

GRE Tunnel IP Source and Destination VRF Membership

H.323 Version 2 Support

H.323 Redundant Zone Support

Half bridge/half router for CPP and PPP

Hierarchical Traffic Shaping

HQoS Support for Ethernet Over MPLS (EoMPLS) VC

HSRP - Hot Standby Router Protocol

HSRP for IPv6

HSRP MD5 Authentication

HSRP support for ICMP Redirects

HSRP support for MPLS VPNs

HTTP Security

HTTP TACAC+ Accounting support

ICMP Unreachable Rate Limiting User Feedback

IEEE 802.1Q VLAN Support

IEEE 802.1t

IGMP State Limit

IGMP Version 1

IGMP Version 2

IGMP Version 3

IGMP Version 3 - Explicit Tracking of Hosts, Groups, and Channels

IGRP

IKE - Initiate Aggressive Mode

Image Verification

Integrated IS-IS Global Default Metric

Integrated IS-IS Point to Point Adjacency over Broadcast Media

Integrated IS-IS Protocol Shutdown Support Maintaining Configuration Parameters

Integrated routing and bridging (IRB)

Interface Alias Long Name Support

Interface Index Persistence

Interface Range Specification

Internet Protocol Control Protocol (IPCP) address negotiation

Invalid Special Parameter Index (SPI) Recovery

Inverse Multiplexing over ATM (IMA)

IP DSCP marking for Frame-Relay PVC

IP Enhanced IGRP Route Authentication

IP Event Dampening

IP Multicast Load Splitting - Equal Cost Multipath (ECMP) using S, G and Next-hop

IP Multicast Load Splitting across Equal-Cost Paths

IP Multicast over 1483 VC Mux Encapsulation on ARMII

IP Multilayer Switching (IP MLS)

IP Named Access Control List

IP over CLNS tunnel

IP Precedence Accounting

IP Precedence for GRE Tunnels

IP Routing

IP Routing of RFC1483 ATM Bridge Encapsulation (RBE)

IP SLAs - DHCP Operation

IP SLAs - Distribution of Statistics

IP SLAs - DLSW+ Operation

IP SLAs - DNS Operation

IP SLAs - FTP Operation

IP SLAs - History Statistics

IP SLAs - HTTP Operation

IP SLAs - ICMP Echo Operation

IP SLAs - ICMP Path Echo Operation

IP SLAs - LSP Health Monitor

IP SLAs - LSP Health Monitor with LSP Discovery

IP SLAs - MPLS VPN Awareness

IP SLAs - Multi Operation Scheduler

IP SLAs - One Way Measurement

IP SLAs - Path Jitter Operation

IP SLAs - Reaction Threshold

IP SLAs - Scheduler

IP SLAs - SNA LU2 Echo

IP SLAs - SNMP Support

IP SLAs - TCP Connect Operation

IP SLAs - UDP Based VoIP Operation

IP SLAs - UDP Echo Operation

IP SLAs - UDP Jitter Operation

IP SLAs - VoIP Threshold Traps

IP SLAs for MPLS Pseudo Wire (PWE3) via VCCV

IP SLAs Random Scheduler

IP Summary Address for RIPv2

IP to ATM CoS, per-VC WFQ and CBWFQ

IP Unnumbered for VLAN-SVI interfaces

IP-to-ATM CoS

IPSec Anti-Replay Window: Expanding and Disabling

IPSec Dead Peer Detection (DPD) Periodic Message Option

IPSEC Preferred Peer

IPSec SA Idle Timers

IPSec VPN Accounting

IPsec VPN Monitoring

IPSec VTI - Virtual Tunnel Interface

IPv6 - CNS Agents

IPv6 - Config Logger

IPv6 - HTTP(S)

IPv6 - SOAP

IPv6 - TCL

IPv6 ACL Extensions for Mobile IPv6

IPv6 Policy-Based Routing

IPv6 Services: Extended Access Control Lists

IPv6 Switching: Provider Edge Router over MPLS (6PE)

IS-IS

IS-IS Caching of Redistributed Routes

IS-IS HMAC-MD5 Authentication

IS-IS Incremental Shortest Path First (i-SPF) Support

IS-IS Limit on Number of Redistributed Routes

IS-IS Mechanism to Exclude Connected IP Prefix from LSP Advertisements

IS-IS MIB

IS-IS Multiarea Support

IS-IS Support for an IS-IS Instance per VRF for IP

IS-IS Support for BFD over IPv4

IS-IS Support for IP Route Tags

IS-IS Support for MTR

IS-IS Support for Priority-Driven IP Prefix RIB Installation

ISDN

ISDN Advice of Charge (AOC)

ISDN Caller ID Callback

ISDN Leased Line at 128kbps

ISDN NFAS

ISDN Progress Indicator support for SIP using 183 Session Progress

ISG: Network Interface: IP Routed, VRF Aware MPLS

ISG: Policy Control: Policy Server: SSG-SESM Protocol

ISG: Policy Control: Service Profiles

ISG:Accounting: Postpaid

ISG:Authentication:DHCP Option 82 Line ID - AAA Authorization support

ISG:Instrumentation: Session & Flow Monitoring (local and external)

ISG:Policy Control: Cisco Policy Language

ISG:Policy Control: Multidimensional Identity per Session

ISG:Policy Control: Policy Server: CoA (QoS, L4 redirect, User ACL, TimeOut)

ISG:Policy Control: Policy Server: CoA ASCII Command Code Support

ISG:Policy Control: Policy: Domain Based (Auto-domain, proxy)

ISG:Policy Control: Policy: Triggers (Time, Volume, Duration)

ISG:Session: Auth: Single Sign On

ISG:Session: LifeCycle: Idle Timeout

ISG:Session: LifeCycle: POD

ISO CLNS

ISSU - IS-IS

Kerberos V Client Support

Key Rollover for Certificate Renewal

L2TP Calling Station ID Suppression

L2TP Congestion Avoidance

L2TP Domain Screening

L2TP Layer 2 Tunneling Protocol

L2TPv3 - Layer-2 Tunneling Protocol Version 3

L2VPN Interworking - Ethernet to VLAN Interworking

L2VPN Interworking: Ethernet VLAN to ATM AAL5

L2VPN Interworking: Ethernet VLAN to Frame Relay

L2VPN Interworking: Frame Relay to PPP

L2VPN Pseudowire Redundancy

LAN Network Manager over DLSw+

LANE dCEF

LANE Optimum Switching

Layer 2 Forwarding-Fast Switching

Layer 2 Local Switching - ATM to Ethernet

Layer 2 Local Switching - ATM to Frame Relay (FR) with Interworking

Layer 2 Local Switching - Frame Relay to Frame Relay

Layer 2 Local Switching - Same-Port Switching for ATM

Layer 2 Local Switching - Same-Port Switching for Frame Relay

Link Aggregation Control Protocol (LACP) (802.3ad) for Gigabit Interfaces

Link Fragmentation and Interleaving (LFI) for Frame Relay and ATM Virtual Circuits

LLID Blocking

Loadsharing IP packets over more than six parallel paths

Local AAA Server

Local Proxy ARP

Local Voice Busyout (LVBO)

Lock and Key

Low Latency Queueing (LLQ)

Low Latency Queueing (LLQ) for Frame Relay

Manual certificate enrollment (TFTP and cut-and-paste)

Manual Certificate Enrollment via TFTP

Memory Leak Detector

Memory Threshold Notifications

Message Banners for AAA Authentication

MGCP - Media Gateway Control Protocol

MGCP support for CallManager (IP-PBX)

MLPPP - Multilink PPP

MLPPP Minimum Links Mandatory

MLPPP QoS (CBWFQ, LLQ, WRED)

Modem over BRI

Modem PassThrough over Voice over IP

Modular QoS CLI (MQC)

Modular QoS CLI (MQC) Three-Level Hierarchical Policer

MPLS (Multiprotocol Label Switching)

MPLS - Egress Netflow

MPLS Class of Service (CoS)

MPLS Class of Service (CoS) Enhancements

MPLS Diff-Serv-Aware Traffic Engineering (DS-TE)

MPLS Egress NetFlow Accounting

MPLS EM - LSP Ping/Trace for LDP & RSVP IPv4 FECs

MPLS EM - MPLS TE MIB Trap Notifications

MPLS Label Switch Controller (LSC) and Enhancements

MPLS LDP - Autoconfiguration

MPLS LDP - Graceful Restart

MPLS LDP - Inbound Label Binding Filtering

MPLS LDP - Label Distribution Protocol (LDP)

MPLS LDP - Lossless MD5 Session Authentication

MPLS LDP - MIB Notifications

MPLS LDP - Session Protection

MPLS LDP - VRF Aware Static Labels

MPLS LSP Ping/Traceroute and AToM VCCV

MPLS Quality of Service (QoS) Enhancements

MPLS Scalability Enhancements for LSC and ATM LSR

MPLS Static Labels

MPLS TE - BFD-triggered Fast Reroute (FRR)

MPLS TE--Tunnel-Based Admission Control (TBAC)

MPLS Traceroute

MPLS Traffic Engineering (TE)

MPLS Traffic Engineering (TE) - Automatic bandwidth adjustment for TE tunnels

MPLS Traffic Engineering (TE) - Class-based Tunnel Selection

MPLS Traffic Engineering (TE) - Configurable Path Calculation Metric for Tunnels

MPLS Traffic Engineering (TE) - Fast Reroute (FRR) Link and Node Protection

MPLS Traffic Engineering (TE) - Interarea Tunnels

MPLS Traffic Engineering (TE) - IP Explicit Address Exclusion

MPLS Traffic Engineering (TE) - LSP Attributes

MPLS Traffic Engineering (TE) - OSPF Support

MPLS Traffic Engineering (TE) - Path Protection

MPLS Traffic Engineering (TE) - RSVP Hello State Timer

MPLS Traffic Engineering (TE) - Scalability Enhancements

MPLS Traffic Engineering (TE): Verbatim Path Support

MPLS Traffic Engineering - AutoTunnel Mesh Groups

MPLS Traffic Engineering -- Overload Avoidance Support for IS-IS

MPLS Traffic Engineering Forwarding Adjacency

MPLS Traffic Engineering--Inter-AS TE

MPLS Traffic Engineering: Shared Risk Link Groups (SRLG)

MPLS Virtual Private Networks (VPN)

MPLS VPN - eBGP Multipath support for CSC and InterAS MPLS VPNs

MPLS VPN - Explicit Null Label Support with BGP IPv4 Label Session

MPLS VPN - Inter-Autonomous System Support

MPLS VPN - Loadbalancing support for Inter-AS and CSC VPNs

MPLS VPN - Multi-Path support for Inter-AS VPNs

MPLS VPN - OSPF PE-CE Support

MPLS VPN - Route Target Rewrite

MPLS VPN Carrier Supporting Carrier

MPLS VPN Carrier Supporting Carrier - IPv4 BGP Label Distribution

MPLS VPN Half Duplex VRF (HDVRF)

MPLS VPN ID

MPLS VPN Inter-AS - IPv4 BGP Label Distribution

MPLS VPN support for EIGRP between Provider Edge (PE) and Customer Edge (CE)

MPLS-Aware NetFlow

MQC - Distribution of Remaining Bandwidth via Ratio

MQC - Multi-Level Priority Queue

MQC - Traffic Shaping Overhead Accounting for ATM

MSDP compliance with IETF RFC 3618

Multi-protocol BGP (MP-BGP) - MPLS VPN

Multi-VRF Selection Using Policy Based Routing (PBR)

Multicast BGP (MBGP)

Multicast Fast Switching Performance Improvement

Multicast NAT

Multicast Routing Monitor (MRM)

Multicast Source Discovery Protocol (MSDP)

Multicast Subsecond Convergence

Multicast VPN Inter-AS Support

Multicast-VPN: Multicast Support for MPLS VPN

Multichassis MultiLink PPP (MMP)

Multiclass Multilink PPP Enhancement

Multilink Frame Relay (FRF.16.1) - Variable Bandwidth Class

Multimedia Conference Manager with Voice Gateway image with RSVP to ATM SVC

Multiple RSA Keypair Support

Multiprotocol over ATM (MPOA)

Multiprotocol over ATM for Token Ring (MPOA)

Named Method Lists for AAA Authorization and Accounting

NAS-Port ID Format C Enhancement

NAT - Network Address Translation

NAT - Performance & Scalability enhancement - Timer Wheel

NAT - Performance Enhancement - CEF Switching Support

NAT - Performance enhancement - Translation Table Optimization

NAT - Rate Limiting NAT Translation

NAT - Support for NetMeeting Directory (Internet Locator Service - ILS)

NAT - Translation of external IP Addresses only

NAT-Support of IP Phone to Cisco Call Manager

Native Service Point over DLSW+

NBAR - Network-based Application Recognition

NBAR Real-time Transport Protocol Payload Classification

NetBEUI over PPP (NBFCP)

NETCONF over SSHv2

NetFlow

NetFlow Aggregation

Netflow Data Export (NDE) Version 8

Netflow Egress Accounting

NetFlow Export of BGP Nexthop Information

Netflow Input Filters and Multi-Sampling rates

NetFlow MPLS Aggregation

Netflow Multiple Export Destinations

NetFlow v9 Export Format

Network Services Engine (NSE)

Network Side ISDN PRI Signaling, Trunking, and Switching

Network Time Protocol (NTP)

Next Hop Resolution Protocol (NHRP)

NSF - BGP

NSF - OSPF

NSF - OSPF (RFC 3623 OSPF Graceful Restart)

NSF / SSO - Any Transport over MPLS (AToM)

NSF Awareness (Nonstop Forwarding Awareness)

NSF/SSO - MPLS TE and RSVP Graceful Restart

NSF/SSO - MPLS VPN

OCSP (Online Certificate Status Protocol)

Offload Server Accounting Enhancement

On Demand Routing (ODR)

Optional OCSP Nonce

OSPF

OSPF Area Transit Capability

OSPF Flooding Reduction

OSPF Forwarding Address Suppression in Translated Type-5 LSAs

OSPF Inbound Filtering using Route Maps with a Distribute List

OSPF Incremental Shortest Path First (i-SPF) Support

OSPF Limit on Number of Redistributed Routes

OSPF Link State Database Overload Protection

OSPF Link-local Signaling (LLS) Per Interface Basis

OSPF MIB Support of RFC 1850 and Latest Extensions

OSPF Not-So-Stubby Areas (NSSA)

OSPF On Demand Circuit (RFC 1793)

OSPF Packet Pacing

OSPF Sham-Link MIB Support

OSPF Sham-Link Support for MPLS VPN

OSPF Shortest Paths First Throttling

OSPF Stub Router Advertisement

OSPF Support for BFD over IPv4

OSPF Support for Fast Hellos

OSPF Support for Forwarding Adjacencies over MPLS Traffic Engineered Tunnels

OSPF Support for Link State Advertisement (LSA) Throttling

OSPF Support for Multi-VRF on CE Routers

OSPF Support for Unlimited Software VRFs per Provider Edge (PE) Router

OSPF Update Packet-Pacing Configurable Timers

Packet Classification Based on Layer3 Packet-Length

PAD Subaddressing

Parse Bookmarks

Parser Cache

Password Authentication Protocol (PAP)

PBR Support for Multiple Tracking Options

Per Interface Mroute State Limit

Per Interface Sticky ARP

Per VLAN Load Balancing for Advanced QinQ Service Mapping

Per VRF AAA

Per-User Configuration

Per-User QoS via AAA Policy Name

Per-VC queuing for ATM

Per-VRF Assignment of BGP Router-ID

Performance Enhancements for IOS ACL

Persistent Self-Signed Certificates

PGM Host

PIM Dense Mode State Refresh

PIM MIB Extension for IP Multicast

PIM Multicast Scalability

PIM Version 1

PIM Version 2

PKI AAA Authorization Using the Entire Subject Name

Policer Enhancement - Multiple Actions

Policy-Based Routing (PBR)

PPP

PPP MLP MRRU negotiation configuration

PPP over ATM

PPP over ATM (IETF-Compliant)

PPP over ATM SVCs

PPP over Frame Relay

PPP-Max-Payload and IWF PPPoE Tag Support

PPPoE - QinQ Support

PPPoE - Session Limiting on Inner QinQ VLAN

PPPOE Agent Remote ID & DSL Line Characteristics Enhancement

PPPoE Circuit-ID Tag Processing

PPPoE Connection Throttling

PPPoE on Ethernet

PPPoE over Gigabit Ethernet interface

PPPoE Service Selection

PPPoE Session limit

PPPoE Session Recovery After Reload

Pragmatic General Multicast (PGM)

Priority Queueing (PQ)

Protected Private Key Storage

Protocol Translation (PT)

PSTN Fallback

PXF Based Frame Relay DE Bit Marking

QoS - Hierarchical Queuing for Ethernet DSLAMs

QoS - MQC Support for MTR

QoS - Percentage-Based Shaping

QoS - Policing Support for GRE Tunnels

QoS Child Service Policy for Priority Class

QoS Device Manager (QDM)

QoS for Virtual Private Networks

QoS over LANE

QoS Packet Marking

QoS Policy Propagation via Border Gateway Protocol (QPPB)

QoS Priority Percentage CLI Support

QoS: Aggregated DSCP / Precedence Values for WRED

QoS: CBQoS Management - Policy-to-Interface Mapping Support

QoS: Ingress Shaping

QoS: Percentage Based Policing

QSIG Protocol Support

Query Mode Definition Per Trustpoint

Query Multiple Servers during Certificate Revocation Check

RADIUS

RADIUS Attribute 44 (Accounting Session ID) in Access Requests

RADIUS Attribute 52 and 53 Gigaword Support

RADIUS Attribute 66 (Tunnel-Client-Endpoint) Enhancements

RADIUS Attribute 77 for DSL

RADIUS Attribute Value Screening

RADIUS Centralized Filter Management

RADIUS for Multiple User Datagram Protocol Ports

RADIUS Logical Line ID

RADIUS NAS-IP-Address Configurability

RADIUS Progress Codes

RADIUS Push for MOD CLI Policies

RADIUS Route Download

RADIUS Server Load Balancing

RADIUS Server Reorder on Fail

RADIUS Tunnel Attribute Extensions

Random Early Detection (RED)

Rate Queues for SVCs per sub-interface

RBSCP (Rate Based Satellite Control Protocol)

Re-Enroll Using Existing Certificate

Real-time Resolution for IPsec Tunnel Peer

Reduced MAC Address Usage

Reliable Static Routing Back-up using Object Tracking

Reserve Memory for Console Access

Resource Pool Management with Direct Remote Services

Response Time Reporter (RTR)

Response Time Reporter (RTR) enhancements

Reverse Route Injection (RRI)

RFC 1483 Bridging on FlexWAN

RFC 1483 for Token Ring Networks

RFC-1483 Bridging

RFC-1483 Bridging Quality of Service (QoS)

RGMP - Router-Port Group Management Protocol

RIF Passthru in DLSw+

RIP

RMON events and alarms

RMON full

Routed Bridge Encapsulation with ATM Virtual Circuit Bundles

RSVP - ATM Quality of Service (QoS) Interworking

RSVP - Resource Reservation Protocol

RSVP Fast Local Repair (RSVP FLR)

RSVP Interface-based Receiver Proxy

RSVP Message Authentication

RSVP Refresh Reduction and Reliable Messaging

RSVP Scalability Enhancements

RSVP Support for Frame Relay

RSVP support for LLQ

RTP Header Compression

RTP Header Compression over Satellite Links

Scalable EoMPLS (SIP-Based)

Secure Copy (SCP)

Secure Shell SSH Version 1 Integrated Client

Secure Shell SSH Version 1 Server Support

Secure Shell SSH Version 2 Client Support

Secure Shell SSH Version 2 Server Support

Selective Packet Discard (SPD)

Selective Virtual-Access Interface Creation

SGCP

Shaping Granularity

Show Command Redirect

Silent Operation Mode

Single Rate 3-Color Marker for Traffic Policing

SIP - Session Initiation Protocol for VoIP

SIP - Session Initiation Protocol for VoIP Enhancements

Snapshot routing

SNMP (Simple Network Management Protocol)

SNMP - Session to Interface Mapping Improvements

SNMP Inform Request

SNMP Manager

SNMP over IPv6

SNMP Support for BGP Policy Accounting

SNMP Support for IOS vLAN Subinterfaces

SNMP support for MTR

SNMP Support over VPNs - Context Based Access Control

SNMPv2C

SNMPv3 (SNMP Version 3)

SNMPv3 - 3DES and AES Encryption Support

Source Interface Selection for Outgoing Traffic with Certificate Authority (CA)

Source Specific Multicast (SSM)

Source Specific Multicast (SSM) - IGMPv3,IGMP v3lite, and URD

Source Specific Multicast (SSM) Mapping

Spanning Tree Protocol (STP)

Spanning Tree Protocol (STP) - Loop Guard

Spanning Tree Protocol (STP) - Portfast

Spanning Tree Protocol (STP) - Portfast BPDU Guard

Spanning Tree Protocol (STP) - Uplink Load Balancing

Spanning Tree Protocol (STP) Extension

SRB - Source Route Bridging Enhancements

SRB - Source-Route bridging

SSO - BFD (Admin Down)

SSO - DHCP Proxy Client

SSRP for LANE

Stack Group Bidding Protocol (SGBP)

Standard IP Access List Logging

Sticky IP

Strict Priority Low Latency Queueing (LLQ)

Stub IP Multicast Routing

Subnetwork Bandwidth Manager (SBM)

Subscriber Service Switch

Suppress BGP Advertisement for Inactive Routes

Switched Multimegabit Data Service (SMDS)

Syslog over IPV6

T.38 Fax Relay for VoIP H.323

Tacacs SENDAUTH function

Tacacs Single Connection

TACACS+

TACACS+ Per VRF

TCP - Explicit Congestion Notification

TCP Application Flags - New Socket Options

TCP Intercept

TCP MSS Adjust

TCP Show Extension

TCP Window Scaling

Throttling of AAA (RADIUS) Records.

Time-Based Access Lists Using Time Ranges

Token Ring LANE

Transparent Bridging

Transparent CCS and Frame Forwarding Enhancements

Transparent Common Channel Signaling (T-CCS)

Triggered RIP

Trunk Conditioning for FRF.11 and Cisco Trunks

Trusted Root Certification Authority

Trustpoint CLI

Tunnel Type of Service (TOS)

Turbo Access Control Lists

Turbo ACL Scalability Enhancements for PXF (Phase 1)

Turbo Flooding of UDP Datagrams

Two-Rate Policer

UDI - Unique Device Identifier

UDLR Tunnel ARP and IGMP Proxy

Uni-Directional Link Routing (UDLR)

Unicast Reverse Path Forwarding (uRPF)

User Maximum Links

Using 31-bit Prefixes on IPv4 Point-to-Point Links

V.110 support for Digital Modems

VBR - NRT Oversubscription

Vendor-Specific RADIUS Attributes

Verify Certificate Chain Command

Virtual Interface Template Service

Virtual Private Dial-up Network (VPDN)

Virtual Profile CEF Switched

Virtual Profiles

Virtual Templates for Protocol Translation

VLAN MAC Address Filtering

VLANs over IP Unnumbered Sub-Interfaces

Voice Busyout Enhancements

Voice over ATM

Voice over IP Q.SIG Network Transparency

VoIP Call Admission Control using RSVP

VPLS Autodiscovery, BGP-based

VPLS Multiple VCs per Spoke

VPN Tunnel Management

VRF aware IPsec

VRF Aware Multicast Error Messages

VRF Aware System Message Logging (Syslog)

VRF-Aware VPDN Tunnels

Warm Reload

WCCP Redirection on Inbound Interfaces

WCCP Version 1

WCCP Version 2

Weighted Fair Queueing (WFQ)

Weighted RED (WRED)

x Digital Subscriber Line (xDSL) Bridge Support

X.25

X.25 Calling Address Insertion and Removal Based on Input Interface

X.25 Closed User Group

X.25 Failover

X.25 Load Balancing

X.25 on ISDN D-Channel

X.25 over Frame Relay (Annex G)

X.25 over TCP (XOT)

X.25 Remote Failure Detection

X.25 Switch Local Acknowledgement

X.25 Switching between PVCs and SVCs

X.28 Emulation

Some features are dependent on product model, interface modules (i.e. Line Cards & Port Adapters), and/or require a software feature license. Click here for more information.