Overview

HPE FlexNetwork MSR1000 Router Series

The HPE FlexNetwork MSR1000 Router Series is a next generation multi-services router designed to deliver unmatched application performance for small branch offices. The MSR1000 provides a flexible multiservice end point for small branches and remote offices that quickly adapts to changing business requirements while delivering integrated, concurrent services on a single, easy-to-manage platform.

Key Features

- Up to 500Kpps IP forwarding; converged high-performance routing, switching, security, voice, mobility
- Embedded security features with hardware-based encryption, IPS, firewall, NAT, and VPNs
- Industry-leading breadth of LAN and WAN connectivity options
- No additional licensing complexity; no cost for advanced features
- Zero-touch solution, with single-pane-of-glass management

Standard Features

Performance

- **Excellent forwarding performance**
  provides forwarding performance up to 500 Kpps; meets current and future bandwidth-intensive application demands of enterprise businesses
- **Powerful encryption capacity-**
  includes embedded hardware encryption accelerator to improve encryption performance

Product architecture

- **SDN/OpenFlow**
  OpenFlow is the communications interface defined between the control and forwarding layers of a SDN (Software-Defined Networking) architecture. OpenFlow separates the data forwarding and routing decision functions. It keeps the flow-based forwarding function and employs a separate controller to make routing decisions. OpenFlow matches packets against one or more flow tables. MSR support OpenFlow 1.3.1
- **Ideal multiservice platform**
  provides WAN router, Ethernet switch, wireless LAN, 3G/4G WAN, firewall, VPN, and SIP/voice gateway all in one box
- **New operating system version**
  Ships with new Comware v7 Operating System delivering the latest in virtualization and routing
- **High-density voice interfaces**
  provide flexible analog voice interface options for easy integration within a wide range of deployments
- **USB interface**
  uses USB memory disk to download and upload configuration files; supports an external USB 3G modem for a 3G WAN uplink
- **Advanced hardware architecture**
  Gigabit ethernet switching and a PCIE bus.

Connectivity

- **VXLAN (Virtual eXtensible LAN)**
  VXLAN (Virtual eXtensible LAN, scalable virtual local area network) is an IP-based network, using the “MAC in UDP” package of Layer VPN technology. VXLAN can be based on an existing ISP or enterprise IP networks for decentralized physical site provides Layer 2 communication and can provide service isolation for different tenants.
- **Virtual Private LAN Service (VPLS)**
  Virtual Private LAN Service (VPLS) delivers a point-to-multipoint L2VPN service over an MPLS or IP backbone. The backbone is transparent to the customer sites, which can communicate with each other as if they were on the same LAN. The following protocols support on MSRs, RFC4447, RFC4761 and RFC4762, BFD detection in VPLS, support hierarchical HOPE (H-VPLS), MAC address recovery in H-VPLS to speed up convergence.
- **NEMO (Network Mobility)**
  Network mobility (NEMO)enables a node to retain the same IP address and maintain application connectivity when the node travels across networks. It allows location-independent routing of IP datagrams on the Internet
- **Packet storm protection**
  protects against broadcast, multicast, or unicast storms with user-defined thresholds
- **Loopback**
  supports internal loopback testing for maintenance purposes and an increase in availability; loopback detection protects against incorrect cabling or network configurations and can be enabled on a per-port or per-VLAN basis for added flexibility
- **3G/4G access support**
  provides 3G/4G LTE wireless access for primary or backup connectivity via a 3G/4G LTE SIC modules certified on various cellular networks; optional carrier 3G/4G USB modems available
- **Flexible port selection**
  provides a combination of fiber and copper interface modules, 100/1000BASE-X auto-speed selection, and 10/100/1000BASE-T auto-speed detection plus auto duplex and MDI/MDI-X
- **Multiple WAN interfaces**
  provide a traditional link with E1, T1, ADSL, ADSL2, ADSL2+, G.SHDSL, Serial, and ISDN backup; provide high-density Ethernet access with Fast Ethernet/Gigabit Ethernet, mobility access with IEEE 802.11b/g/n Wi-Fi and 3G/4G LTE options

Standard Features

- **High-density port connectivity**
  Integrate 4 or 8 Giga LAN switching ports (all switching ports can be configured as routed ports), 2 or 3 SIC slots and up to 30 module options

Layer 2 switching

- **Spanning Tree Protocol (STP)**
  supports standard IEEE 802.1D STP, IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) for faster convergence, and IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)
- **Internet Group Management Protocol (IGMP) and Multicast Listener Discovery (MLD) protocol snooping**
  controls and manages the flooding of multicast packets in a Layer 2 network
- **Port mirroring**
  duplicates port traffic (ingress and egress) to a local or remote monitoring port
- **VLANs**
  support IEEE 802.1Q-based VLANs
- **sFlow**
  allows traffic sampling
- **Define port as switched or routed**
  supports command switch to easily change switched ports to routed (max. eight GE ports)

Layer 3 routing

- **Static IPv4 routing**
  provides simple manually configured Ipv4 routing
- **Routing Information Protocol (RIP)**
  uses a distance vector algorithm with UDP packets for route determination; supports RIPv1 and RIPv2 routing; includes loop protection
- **Open shortest path first (OSPF)**
  delivers faster convergence; uses this link-state routing Interior Gateway Protocol (IGP), which supports ECMP, NSSA, and MD5 authentication for increased security and graceful restart for faster failure recovery
- **Border Gateway Protocol 4 (BGP-4)**
  delivers an implementation of the Exterior Gateway Protocol (EGP) utilizing path vectors; uses TCP for enhanced reliability for the route discovery process; reduces bandwidth consumption by advertising only incremental updates; supports extensive policies for increased flexibility; scales to very large network
- **Intermediate system to intermediate system (IS-IS)**
  uses a path vector Interior Gateway Protocol (IGP), which is defined by the ISO organization for IS-IS routing and extended by IETF RFC 1195 to operate in both TCP/IP and the OSI reference model (Integrated IS-IS)
- **Static Ipv6 routing**
  provides simple manually configured Ipv6 routing
- **Dual IP stack**
  maintains separate stacks for Ipv4 and Ipv6 to ease the transition from an Ipv4-only network to an Ipv6-only network design
- **Routing Information Protocol next generation (RIPng)**
  extends RIPv2 to support Ipv6 addressing
- **OSPFv3**
  provides OSPF support for Ipv6
- **BGP+**
  extends BGP-4 to support Multiprotocol BGP (MBGP), including support for Ipv6 addressing
- **IS-IS for Ipv6**
  extends IS-IS to support Ipv6 addressing
- **Ipv6 tunneling**
  allows Ipv6 packets to traverse Ipv4-only networks by encapsulating the Ipv6 packet into a standard Ipv4 packet; supports manually configured, 6to4, and Intra-Site Automatic Tunnel Addressing Protocol (ISATAP) tunnels; is an important element for the transition from Ipv4 to Ipv6
- **Multiprotocol Label Switching (MPLS)**
  uses BGP to advertise routes across Label Switched Paths (LSPs), but uses simple labels to forward packets from any

Standard Features

Layer 2 or Layer 3 protocol, which reduces complexity and increases performance; supports graceful restart for reduced failure impact; supports LSP tunneling and multilevel stacks

- **Multiprotocol Label Switching (MPLS) Layer 3 VPN**
  allows Layer 3 VPNs across a provider network; uses Multiprotocol BGP (MP-BGP) to establish private routes for increased security; supports RFC 2547bis multiple autonomous system VPNs for added flexibility; supports Ipv6 MPLS VPN
- **Multiprotocol Label Switching (MPLS) Layer 2 VPN**
  establishes simple Layer 2 point-to-point VPNs across a provider network using only MPLS Label Distribution Protocol (LDP); requires no routing and therefore decreases complexity, increases performance, and allows VPNs of non-routable protocols; uses no routing information for increased security; supports Circuit Cross Connect (CCC), Static Virtual Circuits (SVCs), Martini draft, and Kompella-draft technologies
- **Policy routing**
  allows custom filters for increased performance and security; supports ACLs, IP prefix, AS paths, community lists, and aggregate policies

Layer 3 services

- **WAN Optimization**
  MSR performs optimization using TFO and a combination of DRE, Lempel-Ziv (LZ) compression to provide the bandwidth optimization for file service and web applications. The policy engine module determines which traffic can be optimized and which optimization action should be taken. A pair of WAN optimization equipment can discover each other automatically and complete the negotiation to establish a TCP optimization session.
- **NAT-PT**
  Network Address Translation – Protocol Translation (NAT-PT) enables communication between IPv4 andIPv6 nodes by translating between IPv4 and IPv6 packets. It performs IP address translation, and according to different protocols, performs semantic translation for packets. This technology is only suitable for communication between a pure IPv4 node and a pure IPv6 node.
- **Address Resolution Protocol (ARP)**
  determines the MAC address of another IP host in the same subnet; supports static ARPs; gratuitous ARP allows detection of duplicate IP addresses; proxy ARP allows normal ARP operation between subnets or when subnets are separated by a Layer 2 network
- **User Datagram Protocol (UDP) helper**
  redirects UDP broadcasts to specific IP subnets to prevent server spoofing
- **Dynamic Host Configuration Protocol (DHCP)**
  simplifies the management of large IP networks and supports client and server; DHCP Relay enables DHCP operation across subnets

Quality of Service (QoS)

- **Traffic policing**
  supports Committed Access Rate (CAR) and line rate
- **Congestion management**
  supports FIFO, PQ, CQ, WFQ, CBQ, and RTPQ
- **Weighted random early detection (WRED)/random early detection (RED)**
  delivers congestion avoidance capabilities through the use of queue management algorithms
- **Other QoS technologies**
  support traffic shaping, FR QoS, MPLS QoS, and MP QoS/LFI

Standard Features

Security

- **IPS**
  Built-in Intrusion Prevention System (IPS) detects and protects the branch office from security threats. Optional HPE integration filters for client-side, branch protection from exploits and vulnerabilities
- **Enhanced stateful firewall**
  Application layer protocol inspection, Transport layer protocol inspection, ICMP error message check, and TCP SYN check. Support more L4 and L7 protocols like TCP, UDP, UDP-Lite, ICMPv4/ICMPv6, SCTP, DCCP, RAWIP, HTTP, FTP, SMTP, DNS, SIP, H.323, SCCP.
- **Zone based firewall**
  Zone-Based Policy Firewall changes the firewall configuration from the older interface-based model to a more flexible, more easily understood zone-based model. Interfaces are assigned to zones, and inspection policy is applied to traffic moving between the zones. Inter-zone policies offer considerable flexibility and granularity, so different inspection policies can be applied to multiple host groups connected to the same router interface.
- **Auto Discover VPN (ADVPN)**
  collects, maintains, and distributes dynamic public addresses through the VPN Address Management (VAM) protocol, making VPN establishment available between enterprise branches that use dynamic addresses to access the public network; compared to traditional VPN technologies, ADVPN technology is more flexible and has richer features, such as NAT traversal of ADVPN packets, AAA identity authentication, IPSec protection of data packets, and multiple VPN domains
- **Access control list (ACL)**
  supports powerful ACLs for both IPv4 and Ipv6; ACLs are used for filtering traffic to prevent unauthorized users from accessing the network, or for controlling network traffic to save resources; rules can either deny or permit traffic to be forwarded; rules can be based on a Layer 2 header or a Layer 3 protocol header; rules can be set to operate on specific dates or times
- **Terminal Access Controller Access-Control System (TACACS+)**
  delivers an authentication tool using TCP with encryption of the full authentication request, providing additional security
- **Network login**
  standard IEEE 802.1x allows authentication of multiple users per port
- **RADIUS**
  eases security access administration by using a password authentication server
- **Network address translation (NAT)**
  supports one-to-one NAT, many-to-many NAT, and NAT control, enabling NAT-PT to support multiple connections; supports blacklist in NAT/NAT-PT, and a limit on the number of connections, session logs, and multi-instances
- **Secure Shell (SSHv2)**
  uses external servers to securely login into a remote device or securely login into MSR from a remote location; with authentication and encryption, it protects against IP spoofing and plain text password interception; increases the security of SFTP transfers
- **Unicast Reverse Path Forwarding (URPF)**
  allows normal packets to be forwarded correctly, but discards the attaching packet due to lack of reverse path route or incorrect inbound interface; prevents source spoofing and distributed attacks
- **IPSec VPN**
  supports DES, 3DES, and AES 128/192/256 encryption, and MD5 and SHA-1 authentication
- **Attack Detection and Protection**
  responding to network attacks and threats by MSR Comware, support max connection limitation, single-packet attacks protection, Scanning attack protection, flood attack protection, TCP and ICMP Attack Protection etc.

Convergence

- **Internet Group Management Protocol (IGMP)**
  utilizes Any-Source Multicast (ASM) or Source-Specific Multicast (SSM) to manage IPv4 multicast networks; supports IGMPv1, v2, and v3
- **Protocol Independent Multicast (PIM)**
  defines modes of Internet IPv4 and IPv6 multicasting to allow one-to-many and many-to-many transmission of information; supports PIM Dense Mode (DM), Sparse Mode (SM), and Source-Specific Multicast(SSM)

Standard Features

- **Multicast Source Discovery Protocol (MSDP)**
  allows multiple PIM-SM domains to interoperate; is used for inter-domain multicast applications
- **Multicast Border Gateway Protocol (MBGP)**
  allows multicast traffic to be forwarded across BGP networks and kept separate from unicast traffic

Resiliency and high availability

- **Embedded NetStream**
  Improves traffic distribution using powerful scheduling algorithms, including Layer 4 to 7 services; monitors the health status of servers and firewalls
- **Embedded VPN and stateful firewall**
  Provide enhanced stateful packet inspection and filtering; deliver advanced VPN services with Triple DES (3DES) and Advanced Encryption Standard (AES) encryption at high performance and low latency, and application prioritization and enhancement

Resiliency and high availability

- **Backup Center**
  acts as a part of the management and backup function to provide backup for device interfaces; delivers reliability by switching traffic over to a backup interface when the primary one fails
- **Intelligent Resilient Framework (IRF)**
  IRF allows the customer to build an IRF stack, namely a logical device, by interconnecting multiple devices through stack ports. The customer can manage all the devices in the IRF stack by managing the logical device, which is cost-effective like a box-type device, and scalable and highly reliable like a chassis-type distributed device
- **In-Service Software Upgrade (ISSU)**
  Lowers downtime caused by planned maintenance and software upgrades
- **Embedded Automation Architecture (EAA)**
  Monitors the internal event and status of system hardware and software, identifying potential problems as early as possible; collects field information and attempts to automatically repair the issues; based on the user configuration, on-site information will be sent to technical support
  Multiple internal power supply slots Delivers higher reliability with a maximum of four internal power supplies, which can be installed
- **Bidirectional Forwarding Detection (BFD)**
  Detects quickly the failures of the bidirectional forwarding paths between two devices for upper-layer protocols such as routing protocols and MPLS
- **Virtual Router Redundancy Protocol (VRRP)**
  allows groups of two routers to dynamically back each other up to create highly available routed environments; supports VRRP load balancing

Management

- **Ease of deployment**
  Zero-touch deployment, supports TR069, USB disk auto deployment and 3G SMS auto deployment
- **HPE Intelligent Management Center (IMC)**
  Integrates fault management, element configuration, and network monitoring from a central vantage point; built-in support for third-party devices enables network administrators to centrally manage all network elements with a variety of automated tasks, including discovery, categorization, baseline configurations, and software images; the software also provides configuration comparison tools, version tracking, change alerts, and more
- **Industry-standard CLI with a hierarchical structure**
  reduces training time and expenses, and increases productivity in multivendor installations
- **Management security**
  restricts access to critical configuration commands; offers multiple privilege levels with password protection; ACLs provide telnet and SNMP access; local and remote syslog capabilities allow logging of all access
- **SNMPv1, v2, and v3**
  provide complete support of SNMP; provide full support of industry-standard Management Information Base (MIB) plus private extensions; SNMPv3 supports increased security using encryption

Standard Features

- **Remote monitoring (RMON)**
  uses standard SNMP to monitor essential network functions; supports events, alarm, history, and statistics group plus a private alarm extension group
- **FTP, TFTP, and SFTP support**
  offers different mechanisms for configuration updates; FTP allows bidirectional transfers over a TCP/IP network; trivial FTP (TFTP) is a simpler method using User Datagram Protocol (UDP); Secure File Transfer Protocol (SFTP) runs over an SSH tunnel to provide additional security
- **Debug and sampler utility**
  supports ping and traceroute for both IPv4 and Ipv6
- **Network Time Protocol (NTP)**
  synchronizes timekeeping among distributed time servers and clients; keeps timekeeping consistent among all clock-dependent devices within the network so that the devices can provide diverse applications based on the consistent time
- **Information center**
  provides a central repository for system and network information; aggregates all logs, traps, and debugging information generated by the system and maintains them in order of severity; outputs the network information to multiple channels based on user-defined rules
- **Management interface control**
  provides management access through modem port and terminal interface; provides access through terminal interface, telnet, or SSH
- **Network Quality Analyzer (NQA)**
  analyzes network performance and service quality by sending test packets, and provides network performance and service quality parameters such as jitter, TCP, or FTP connection delays; allows network manager to determine overall network performance and diagnose and locate network congestion points or failures
- **Role-based security**
  Delivers role-based access control (RBAC); supports 16 user levels (0~15)
  Standards-based authentication support for LDAP Integrates seamlessly into existing authentication services

Additional information

- **OPEX savings**
  simplifies and streamlines deployment, management, and training through the use of a common operating system, thereby cutting costs as well as reducing the risk of human errors associated with having to manage multiple operating systems across different platforms and network layers
- **High reliability**
  provides a state-of-the-art unified code base
- **Faster time to market**
  allows new and custom features to be brought rapidly to market through engineering efficiencies, delivering better initial and ongoing stability
- **Green initiative support**
  provides support for RoHS and WEEE regulations

Warranty and support

- **1-year Warranty**
  See **http://www.hpe.com/networking/warrantysummary** for warranty and support information included with your product purchase.
- **Software releases**
  to find software for your product, refer to **http://www.hpe.com/networking/support**; for details on the software releases available with your product purchase, refer to **http://www.hpe.com/networking/warrantysummary**

Configuration Information

BTO Models

Router Chassis

Rule #	Description	SKU
1, 2, 3	HPE FlexNetwork MSR1003 8S AC Router • Comeware v7 based • 2 RJ-45 autosensing 10/100/1000 WAN port • 8 RJ-45 autosensing 10/100/1000 LAN ports • 3 - SIC module slots / 1 DSIC • 1 USB 2.0 Port for 3G modem and USB disk • 1 CON/AUX port • 0 - VPM slot • 1GB DDR3 SDRAM included (default=1GB \ max=1GB SDRAM) • AC Power Supply included • 1U - Height	JH060A
	HPE FlexNetwork MSR1003 8S AC Router • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JH060A
	HPE FlexNetwork MSR1003 8S AC Router • C15 PDU Jumper Cord (ROW)	JH060A
	HPE FlexNetwork MSR1003 8S AC Router • NEMA L6-20P Cord (NA/MEX/JP/TW)	JH060A
	HPE FlexNetwork MSR1003 8S AC Router • No Localized Power Cord Selected	JH060A
1, 2, 3	HPE FlexNetwork MSR1003 8 AC Router • Comeware v5 based • 2 RJ-45 autosensing 10/100/1000 WAN port • 8 RJ-45 autosensing 10/100/1000 LAN ports • 3 - SIC module slots / 1 DSIC • 1 USB 2.0 Port for 3G modem and USB disk • 1 CON/AUX port • 0 - VPM slot • 512MB DDR3 SDRAM included (default=512MB \ max=512MB SDRAM) • AC Power Supply included • 1U - Height	JG732A
	HPE FlexNetwork MSR1003 8 AC Router • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JG732A
	HPE FlexNetwork MSR1003 8 AC Router • C15 PDU Jumper Cord (ROW)	JG732A
	HPE FlexNetwork MSR1003 8 AC Router • NEMA L6-20P Cord (NA/MEX/JP/TW)	JG732A
	HPE FlexNetwork MSR1003 8 AC Router • No Localized Power Cord Selected	JG732A
1, 2, 3, 4, 5	HPE FlexNetwork MSR1002 4 AC Router	JG875A

Configuration Information

- Comeware v5 based
- 1 RJ-45 autosensing 10/100/1000 WAN port
- 4 RJ-45 autosensing 10/100/1000 LAN ports
- 1 SFP port (min=0 \ max=1 SFP Transceiver)
- 2 - SIC module slots / 1 DSIC
- 1 USB 2.0 Port for 3G modem and USB disk
- 1 CON/AUX port
- 0 - VPM slot
- 1GB DDR3 SDRAM included (default=1GB \ max=1GB SDRAM)
- AC Power Supply included
- 1U - Height

HPE FlexNetwork MSR1002 4 AC Router JG875A

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

HPE FlexNetwork MSR1002 4 AC Router JG875A

- C15 PDU Jumper Cord (ROW)

HPE FlexNetwork MSR1002 4 AC Router JG875A

- NEMA L6-20P Cord (NA/MEX/JP/TW)

HPE FlexNetwork MSR1002 4 AC Router JG875A

No Localized Power Cord Selected

Configuration Rules

Rule #	Description	
1	AC Power Supply included	
2	Localization required on orders without #B2B, #B2C or #B2E options.	
3	#B2E is Offered only in NA, Mexico, Taiwan and Japan.	
4	The following Transceivers install into this Router:	
	HPE X115 100M SFP LC FX Transceiver	JD102B
	HPE X110 100M SFP LC LX Transceiver	JD120B
5	The following Transceivers install into this Router:	
	HPE X120 1G SFP LC SX Transceiver	JD118B
	HPE X120 1G SFP LC LX Transceiver	JD119B
	HPE X120 1G SFP LC BX 10-U Transceiver	JD098B
	HPE X120 1G SFP LC BX 10-D Transceiver	JD099B
	HPE X120 1G SFP LC LH100 Transceiver	JD103A
	HPE X120 1G SFP RJ45 T Transceiver	JD089B

Notes:

- Drop down under power supply should offer the following options and results:
  - Switch/Router/Power Supply to PDU Power Cord - #B2B in North America, Mexico, Taiwan, and Japan or #B2C ROW. (Watson Default B2B or B2C for Rack Level CTO)
  - Switch/Router/Power Supply to Wall Power Cord - Localized Option (Watson Default for BTO and Box Level CTO)
  - High Volt Switch/Router/Power Supply to Wall Power Cord - #B2E Option. (Offered only in North America, Mexico, Taiwan, and Japan)
- MSR1003-8 (JG732A) is Comeware v5 based.
- OCA Only Model Selection Form -
  HPE Offering > Aruba > Routers Branch:
  HPE FlexNetwork MSR1000 Router Series

Configuration Information

Transceivers

SFP Transceivers

Rule #	Description	SKU
	HPE X115 100M SFP LC FX Transceiver	JD102B
	HPE X110 100M SFP LC LX Transceiver	JD120B
	HPE X120 1G SFP LC SX Transceiver	JD118B
	HPE X120 1G SFP LC LX Transceiver	JD119B
	HPE X120 1G SFP LC BX 10-D Transceiver	JD099B
	HPE X120 1G SFP LC BX 10-U Transceiver	JD098B
	HPE X120 1G SFP LC LH100 Transceiver	JD103A
	HPE X120 1G SFP RJ45 T Transceiver	JD089B

Internal Power Supplies

Internal Power Supplies included

Cables

Rule #	Description	SKU
	HPE FlexNetwork X260 Mini D-28 to 4-RJ45 0.3m Router Cable	JG263A
	HPE FlexNetwork X200 V.24 DTE 3m Serial Port Cable	JD519A
	HPE FlexNetwork X200 V.24 DCE 3m Serial Port Cable	JD521A
	HPE FlexNetwork X200 V.35 DTE 3m Serial Port Cable	JD523A
	HPE FlexNetwork X200 V.35 DCE 3m Serial Port Cable	JD525A
	HPE FlexNetwork X260 E1 (2) BNC 75 ohm 3m Router Cable	JD175A
	HPE FlexNetwork X260 E1 RJ45 BNC 75-120 ohm Conversion Router Cable	JD511A
	HPE FlexNetwork X260 T1 Router Cable	JD518A
	HPE FlexNetwork X260 E1 RJ45 to 2xBNC 75ohm 3m Router Cable	JH294A
	HPE FlexNetwork X260 E1 RJ45 120 ohm 2m Router Cable	JC156A
Notes:	The following cable is used for RJ45 BNC Conversion:	
	HPE FlexNetwork X260 E1 RJ45 BNC 75-120 ohm Conversion Router Cable	JD511A

Router Enclosure Options

Antenna Cables

Rule #	Description	SKU
	HPE MSR 3G RF 2.8m Antenna Cable	JG522A

Technical Specifications

HPE FlexNetwork MSR1002 4 AC Router (JG875A)		
I/O ports and slots	2 SIC slots, or 1 DSIC slot	
	2 RJ-45 autosensing 10/100/1000 WAN ports	
	1 SFP fixed Gigabit Ethernet WAN port	
	3 RJ-45 autosensing 10/100/1000 LAN ports	
Additional ports and slots	1 USB 2.0 1 RJ-45 console port to access limited CLI port	
AP characteristics	**Radios (via optional modules)**	3G, 4G LTE
Physical characteristics	**Dimensions**	14.17(w) x 11.81(d) x 1.74(h) in (36 x 30 x 4.42 cm) (1U height)
	Weight	10.69 (4.85 kg)
Memory and processor	RISC @ 667 MHz, 512 MB DDR3 SDRAM, 256 MB flash	
Mounting and enclosure	Desktop or can be mounted in a EIA standard 19-inch telco rack when used with the rack-mount kit in the package.	
Performance	**Throughput**	up to 500 Kpps (64-byte packets)
	Routing table size	200000 entries (IPv4), 200000 entries (IPv6)
	Forwarding table size	200000 entries (IPv4), 200000 entries (IPv6)
Environment	**Operating temperature**	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	5% to 95%, noncondensing
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Nonoperating/Storage relative humidity	5% to 95%, noncondensing
	Altitude	up to 16,404 ft (5 km)
Electrical characteristics	**Maximum heat dissipation**	92 BTU/hr (97.06 kJ/hr)
	Voltage	100 - 240 VAC, rated
	Maximum power rating	30 W
	Frequency	50/60 Hz
	Notes:	Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.
Reliability	MTBF (years)	71.81
Safety	UL 60950-1; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1; FDA 21 CFR Subchapter J; AS/NZS 60950-1; GB 4943.1	
Emissions	VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; ICES-003 Class A; EN 300 386 v1.6.1; CISPR 24; AS/NZS CISPR 22 Class A; EN 61000-3-2; EN 61000-3-3; FCC (CFR 47, Part 15) Class A	
Telecom	FCC part 68; CS-03	
Management	IMC—Intelligent Management Center; command-line interface; limited command-line interface; configuration menu; out-of-band management (RJ-45 Ethernet); SNMP Manager; Telnet; RMON1; FTP; in-line and out-of-band; modem interface; out-of-band management (serial RS-232C or Micro USB); IEEE 802.3 Ethernet MIB	
Services	Refer to the Hewlett Packard Enterprise website at **http://www.hpe.com/networking/services** for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.	

Technical Specifications

HPE FlexNetwork MSR1003 8 AC Router (JG732A)		
I/O ports and slots	3 SIC slots, or 1 DSIC slot, and 1 SIC slot	
	2 RJ-45 autosensing 10/100/1000 WAN ports	
	8 RJ-45 autosensing 10/100/1000 LAN ports	
Additional ports and slots	1 USB 2.0 1 RJ-45 console port to access limited CLI port	
AP characteristics	**Radios (via optional modules)**	3G, 4G LTE
Physical characteristics	**Dimensions**	14.17(w) x 11.81(d) x 1.744(h) in (36 x 30 x 4.42 cm)
	Weight	10.69 lb (4.85 kg)
Memory and processor	RISC @ 667 MHz, 512 MB DDR3 SDRAM, 256 MB flash	
Mounting and enclosure	Desktop or can be mounted in a EIA standard 19-inch telco rack when used with the rack-mount kit in the package.	
Performance	**Throughput**	up to 500 Kpps (64-byte packets)
	Routing table size	30000 entries (IPv4), 30000 entries (IPv6)
	Forwarding table size	30000 entries (IPv4), 30000 entries (IPv6)
Environment	**Operating temperature**	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	5% to 95%, noncondensing
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Nonoperating/Storage relative humidity	5% to 95%, noncondensing
	Altitude	up to 16,404 ft (5 km)
Electrical characteristics	**Maximum heat dissipation**	65 BTU/hr (68.58 kJ/hr)
	Voltage	100 - 240 VAC, rated
	Maximum power rating	30 W
	Frequency	50/60 Hz
	Notes:	Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.
Reliability	MTBF (years)	137.5
Safety	UL 60950-1; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1; FDA 21 CFR Subchapter J; AS/NZS 60950-1; GB 4943.1	
Emissions	VCCI Class A;EN 55022 Class A; CISPR 22 Class A; EN 55024; ICES-003 Class A; EN 300 386 v1.6.1; CISPR 24; AS/NZS CISPR 22 Class A; EN 61000-3-2; EN 61000-3-3; FCC (CFR 47, Part 15) Class A	
Telecom	FCC part 68; CS-03	
Management	IMC—Intelligent Management Center; command-line interface; limited command-line interface; configuration menu; out-of-band management (RJ-45 Ethernet); SNMP Manager; Telnet; RMON1; FTP; in-line and out-of-band; modem interface; out-of-band management (serial RS-232C or Micro USB); IEEE 802.3 Ethernet MIB	
Services	Refer to the Hewlett Packard Enterprise website at **http://www.hpe.com/networking/services** for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.	

Technical Specifications

HPE FlexNetwork MSR1003 8S AC Router (JH060A)		
I/O ports and slots	3 SIC slots, or 1 DSIC slot, and 1 SIC slot	
	2 RJ-45 autosensing 10/100/1000 WAN ports	
	8 RJ-45 autosensing 10/100/1000 LAN ports	
Additional ports and slots	1 USB 2.0 1 RJ-45 console port to access limited CLI port	
AP characteristics	**Radios (via optional modules)**	3G, 4G LTE
Physical characteristics	**Dimensions**	14.17(w) x 11.81(d) x 1.74(h) in (36 x 30 x 4.42 cm)
	Weight	10.69 lb (4.85 kg)
Memory and processor	RISC @ 667 MHz, 1GB DDR3 SDRAM, 256 MB flash	
Mounting and enclosure	Desktop or can be mounted in a EIA standard 19-inch telco rack when used with the rack-mount kit in the package.	
Performance	**Throughput**	up to 500 Kpps (64-byte packets)
	Routing table size	200,000 entries (IPv4), 200,000 entries (IPv6)
	Forwarding table size	200,000 entries (IPv4), 200,000 entries (IPv6)
Environment	**Operating temperature**	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	5% to 95%, noncondensing
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Nonoperating/Storage relative humidity	5% to 95%, noncondensing
	Altitude	up to 16,404 ft (5 km)
Electrical characteristics	**Maximum heat dissipation**	65 BTU/hr (68.58 kJ/hr)
	Voltage	100 - 240 VAC, rated
	Maximum power rating	30 W
	Frequency	50/60 Hz
	Notes:	Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.
Reliability	**MTBF (years)**	137.5
Safety	UL 60950-1; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1; FDA 21 CFR Subchapter J; AS/NZS 60950-1; GB 4943.1	
Emissions	VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; ICES-003 Class A; EN 300 386 v1.6.1; CISPR 24; AS/NZS CISPR 22 Class A; EN 61000-3-2; EN 61000-3-3; FCC (CFR 47, Part 15) Class A	
Telecom	FCC part 68; CS-03	
Management	IMC—Intelligent Management Center; command-line interface; limited command-line interface; configuration menu; out-of-band management (RJ-45 Ethernet); SNMP Manager; Telnet; RMON1; FTP; in-line and out-of-band; modem interface; out-of-band management (serial RS-232C or Micro USB); IEEE 802.3 Ethernet MIB	
Services	Refer to the Hewlett Packard Enterprise website at **http://www.hpe.com/networking/services** for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.	

Technical Specifications

Standards and Protocols (applies to JG875A, JG060A, JG732A and R8V33A models)

BGP

- RFC 1163 Border Gateway Protocol (BGP)
- RFC 1267 Border Gateway Protocol 3 (BGP-3)
- RFC 1657 Definitions of Managed Objects For BGPv4 (v5 support)
- RFC 2473 (v7 support)
- RFC 1771 BGPv4 (v5 support)
- RFC 4271 (v7 support)
- RFC 1772 Application of the BGP (v5 support, v7 not support)
- RFC 1773 Experience with the BGP-4 Protocol
- RFC 1774 BGP-4 Protocol Analysis
- RFC 1965 BGP-4 confederations (v5 support, v7 not support)
- RFC 1997 BGP Communities Attribute (v7 & v5)
- RFC 2439 BGP Route Flap Damping (v7 & v5)
- RFC 2547 BGP/MPLS VPNs (v5 support)
- RFC 4364 (v7 Support) Updated—By RFC 4577, RFC 4684, RFC 5462
- RFC 4577 OSPF as the Provider/Customer Edge Protocol for BGP/MPLS IP Virtual Private Networks (VPNs) (Updates RFC 4364)
- RFC 4684 Constrained Route Distribution for Border Gateway Protocol/MultiProtocol Label Switching (BGP/MPLS) Internet
- Protocol (IP) Virtual Private Networks (VPNs) (Updates RFC 4364)
- RFC 2796 BGP Route Reflection (v5 support)
- RFC 4456 (v7 support)
- RFC 2842 Capability Advertisement with BGP-4 (v5 support, v7 not support)
- RFC 2858 BGP-4 Multi-Protocol Extensions (v5 support)
- RFC 4760 (v7 support)
- RFC 4760 Multiprotocol Extensions for BGP-4
- RFC 2918 Route Refresh Capability (v7 & v5)
- RFC 3065 Autonomous System Confederations for BGP (v5 not support, v7 Obsoleted by RFC 5065)
- RFC 5065 Autonomous System Confederations for BGP
- RFC 3107 Support BGP carry label for MPLS
- RFC 3392 Capabilities Advertisement with BGP-4 (v5 not support, v7 Obsoleted by RFC 5492)
- RFC 5492 Capabilities Advertisement with BGP-4
- RFC 4271 A Border Gateway Protocol 4 (BGP-4) (v7 support, v5 not support)
- RFC 4273 Definitions of Managed Objects for BGP-4 (v7 support, v5 not support)
- RFC 4274 BGP-4 Protocol Analysis
- RFC 4275 BGP-4 MIB Implementation Survey
- RFC 4276 BGP-4 Implementation Report
- RFC 4277 Experience with the BGP-4 Protocol
- RFC 4360 BGP Extended Communities Attribute (v7 support, v5 not support)
- RFC 4456 BGP Route Reflection: An Alternative to Full Mesh Internal BGP (IBGP) (v7 support, v5 not support)
- RFC 4724 Graceful Restart Mechanism for BGP (v7 support, v5 not support)
- RFC 4760 Multiprotocol Extensions for BGP-4 (v7 support, v5 not support)
- RFC 1998 An Application of the BGP Community Attribute in Multi-home Routing (v5 support, v7 not support)

Denial of service protection

- CPU DoS Protection
- Rate Limiting by ACLs

Technical Specifications

Device management

- RFC 1155 Structure and Mgmt Information (SMIv1) (v7 & v5)
- RFC 1157 SNMPv1/v2c (v7 & v5)
- RFC 1305 NTPv3 (v7 support, v5 not support)
- RFC 1591 DNS (client)
- RFC 1902 (SNMPv2) (v5 not support, v7 Obsoleted by RFC 2578)
- RFC 1908 (SNMPv1/2 Coexistence)
- RFC 1945 Hypertext Transfer Protocol—HTTP/1.0 (v7 support, v5 not support)
- RFC 2271 Framework
- RFC 2573 (SNMPv3 Applications) (v5 not support, v7 Obsoleted by RFC 3413)
- RFC 3413 Simple Network Management Protocol (SNMP) Applications.
- RFC 2576 (Coexistence between SNMPv1, v2, v3) (v5 not support, v7 Obsoleted by RFC 3584)
- RFC 3584 Coexistence between Version 1, Version 2, and Version 3 of the Internet-standard Network Management Framework
- RFC 2578-2580 SMIv2 (v7 support, v5 not support)
- RFC 2579 (SMIv2 Text Conventions) (v7 support, v5 not support)
- RFC 2580 (SMIv2 Conformance) (v7 support, v5 not support)
- RFC 3416 (SNMP Protocol Operations v2) (v7 support, v5 not support)
- RFC 3417 (SNMP Transport Mappings) (v5 not support, v7 Obsoletes RFC 1906) (Updated—By RFC 4789, RFC 5590)

General Protocols

- RFC 768 UDP (v7 & v5)
- RFC 760 DoD standard Internet Protocol (v5 not support, v7 Obsoleted by RFC 0791)
- RFC 764 Telnet Protocol specification (v5 not support, v7 Obsoleted by RFC 0854)
- RFC 777 Internet Control Message Protocol (v5 not support, v7 Obsoleted by RFC 0854)
- RFC 783 TFTP Protocol (revision 2) (v5 not support, v7 Obsoleted by RFC 1350)
- RFC 791 IP (v5 support, v7 updated by RFC 0792)
- RFC 792 ICMP (v5 support, v7 obsoletes RFC 0777) (Updated—By RFC 0950, RFC 4884)
- RFC 0950 Internet Standard Subnetting Procedure
- RFC 793 TCP (v5 support, v7 Updated—By RFC 1122, RFC 3168)
- RFC 3168 The Addition of Explicit Congestion Notification (ECN) to IP (v7 Obsoletes RFC 2481) (Updates RFC 2474, RFC 2401, RFC 0793)
- RFC 813 Window and Acknowledgement Strategy in TCP
- RFC 815 IP datagram reassembly algorithms
- RFC 826 ARP (v5 support, v7 support) (Updated—By RFC 5227, RFC 5494)
- RFC 854 Telnet Protocol Specification (v5 support, v7 Obsoletes RFC 0764) (Updated—By RFC 5198)
- RFC 855 Telnet Option Specifications
- RFC 856 Telnet Binary Transmission (v7 support, v5 not support)
- RFC 857 Telnet Echo Option (v5 support, v7 not support)
- RFC 858 Telnet Suppress Go Ahead Option (v5 support, v7 not support)
- RFC 862 Echo Service (TCP Echo) (v7 support, v5 not support)
- RFC 879 TCP maximum segment size and related topics
- RFC 882 Domain names: Concepts and Facilities (v5 not support, v7 Obsoleted by RFC 1034, 1035)
- RFC 883 Domain names: Implementation specification (v5 not support, v7 Obsoleted by RFC 1034, 1035)
- RFC 894 A Standard for the Transmission of IP Datagrams over Ethernet Networks (v7 support, v5 not support)
- RFC 896 Congestion Control in IP/TCP Internetworks
- RFC 906 Bootstrap loading using TFTP (Trivial File Transfer Protocol)
- RFC 917 Internet Subnets (v7 support, v5 not support)
- RFC 919 Broadcasting Internet Datagrams
- RFC 950 Internet Standard Subnetting Procedure (v7 & v5)
- RFC 951 BOOTP (v5 not support, v7 Updated—By RFC 1395, RFC 1497,
- RFC 1532, RFC 1542, RFC 5494)

Technical Specifications

- RFC 958 Network Time Protocol (NTP) (v5 not support, v7 Obsoleted by RFC 1305)
- RFC 959 File Transfer Protocol (FTP) (v5 support, v7 Obsoletes RFC 0765, Updated—By RFC 2228, RFC 2640, RFC 2773, RFC 3659)
- RFC 2228 FTP Security Extensions (v7 support, v5 not support)
- RFC 973 Domain system changes and Observations (v5 not support, v7 Obsoleted by RFC 1034, 1035)
- RFC 988 Host extensions for IP multicasting (v5 not support, v7 Obsoleted by RFC 1112)
- RFC 1027 Proxy ARP (v7 support, v5 not support)
- RFC 1034 Domain names—concepts and facilities (v5 not support, v7 support)
- RFC 1035 Domain names—implementation and specification (v5 not support, v7 support)
- RFC 1048 BOOTP Vendor Information Extensions (v5 not support, v7 Obsoleted by RFC 1084, RFC 1395, RFC 1497, RFC 1533)
- RFC 1054 Host extensions for IP multicasting (v5 not support, v7 Obsoleted by RFC 1112) RFC 1058 RIPv1 (v5 support, v7 Updated—By RFC 1388, RFC 1723)
- RFC 1059 Network Time Protocol (version 1) specification and implementation (v5 not support, v7 Obsoleted by RFC 1305)
- RFC 1060 Assigned numbers
- RFC 1063 IP MTU (Maximum Transmission Unit) discovery options
- RFC 1071 Computing the Internet checksum (v5 not support, v7 updated by RFC 1141)
- RFC 1072 TCP extensions for long-delay paths (v5 not support, v7 Obsoleted by RFC 1323)
- RFC 1079 Telnet terminal speed option
- RFC 1084 BOOTP Vendor Information Extensions
- RFC 1122 Requirements for Internet Hosts—Communication Layers (v5 not support, v7 Updated—By RFC 4379)
- RFC 4379 Detecting Multi-Protocol Label Switched (MPLS) Data Plane Failures (Updated—By RFC 5462)
- RFC 1141 Incremental updating of the Internet checksum (v5 support, v7 updates RFC 1071, Updated—By RFC 1624)
- RFC 1142 OSI IS-IS Intra-domain Routing Protocol
- RFC 1164 Application of the Border Gateway Protocol in the Internet RFC 1166 Internet address used by Internet Protocol (IP) (v5 not support, v7 obsoletes RFC 1117, RFC 1062, RFC 1020, Updated—By RFC 5737)
- RFC 1171 Point-to-Point Protocol for the transmission of multi-protocol datagrams over Point-to-Point links
- RFC 1172 Point-to-Point Protocol (PPP) initial configuration options (v5 not support, v7 Obsoleted by RFC 1332)
- RFC 1185 TCP Extension for High-Speed Paths (v5 not support, v7 Obsoleted by RFC 1323)
- RFC 1191 Path MTU discovery RFC 1195 OSI IS-IS for IP and Dual Environments (v5 support, v7 Updated—By RFC 1349, RFC 5302, RFC 5304)
- RFC 1213 Management Information Base for Network Management of TCP/IP-based internets (v5 support, v7 obsoletes RFC 1158, Updated—By RFC 2011, RFC 2012, RFC 2013)
- RFC 1253 (OSPFv2)
- RFC 1265 BGP Protocol Analysis
- RFC 1266 Experience with the BGP Protocol
- RFC 1268 Application of the Border Gateway Protocol in the Internet
- RFC 1271 Remote Network Monitoring Management Information Base
- RFC 1284 Definitions of Managed Objects for the Ethernet like Interface Types C1
- RFC 1294 Multiprotocol Interconnect over Frame Relay (v5 support)
- RFC 2427 (v7 support)
- RFC 1305 NTPv3 (IPv4 only) (v7 support, v5 not support)
- RFC 1321 The MD5 Message-Digest Algorithm
- RFC 1323 TCP Extensions for High Performance (v7 & v5)
- RFC 1331 The Point-to-Point Protocol (PPP) for the Transmission of Multi-protocol Datagrams over Point-to-Point Links
- RFC 1332 The PPP Internet Protocol Control Protocol (IPCP) (v7 support, v5 not support)
- RFC 1333 PPP Link Quality Monitoring
- RFC 1334 PPP Authentication Protocols
- RFC 1349 Type of Service (v7 support, v5 not support)

Technical Specifications

- RFC 1350 TFTP Protocol (revision 2) (v7 support, v5 not support)
- RFC 1364 BGP OSPF Interaction
- RFC 1370 Applicability Statement for OSPF
- RFC 1377 The PPP OSI Network Layer Control Protocol (OSINLCP) (v7 support, v5 not support)
- RFC 1393 Traceroute Using an IP Option (v7 support, v5 not support)
- RFC 1395 BOOTP Vendor Information Extensions (v7 support, v5 not support)
- RFC 1398 Definitions of Managed Objects for the Ethernet like Interface Types
- RFC 1403 BGP OSPF Interaction
- RFC 1444 Conformance Statements for version 2 of the Simple Network Management Protocol (SNMPv2)
- RFC 1449 Transport Mappings for version 2 of the Simple Network Management Protocol (SNMPv2)
- RFC 1471 The Definitions of Managed Objects for the Link Control Protocol of the Point-to-Point Protocol
- RFC 1473 The Definitions of Managed Objects for the IP Network Control Protocol of the Point-to-Point Protocol
- RFC 1483 Multiprotocol Encapsulation over ATM Adaptation Layer 5 (v5 not support, v7 Obsoleted by RFC 2684)
- RFC 1490 Multiprotocol Interconnect over Frame Relay (v5 support, v7 Obsoleted by RFC 2427)
- RFC 1497 BOOTP Vendor Information Extensions (v7 support, v5 not support) RFC 1519 CIDR (v5 not support, v7 Obsoleted by RFC 4632)
- RFC 1531 Dynamic Host Configuration Protocol
- RFC 1532 Clarifications and Extensions for the Bootstrap Protocol (v5 not support, v7 obsoleted by RFC 1542)
- RFC 1533 DHCP Options and BOOTP Vendor Extensions (v5 not support, v7 obsoleted by RFC 2132)
- RFC 1534 Interoperation Between DHCP and BOOTP
- RFC 1541 Dynamic Host Configuration (v5 not support, v7 Obsoleted by RFC 2131) Protocol
- RFC 1542 BOOTP Extensions (v7 support, v5 not support)
- RFC 1542 Clarifications and Extensions for the Bootstrap Protocol (v7 support, v5 not support)
- RFC 1548 The Point-to-Point Protocol (PPP) RFC 1549 PPP in HDLC Framing
- RFC 1570 PPP LCP (Point-to-Point Protocol Link Control Protocol) Extensions (v5 support, v7 not support)
- RFC 1577 Classical IP and ARP over ATM (v5 not support, v7 Obsoleted by)
- RFC 1618 PPP over ISDN
- RFC 1619 PPP over SONET/SDH (Synchronous Optical Network/Synchronous Digital Hierarchy)
- RFC 1624 Incremental Internet Checksum (v7 support, v5 not support)
- RFC 1631 NAT (v5 not support, v7 Obsoleted by RFC 3022)
- RFC 1650 Definitions of Managed Objects for the Ethernet-like Interface Types using SMIv2
- RFC 1661 The Point-to-Point Protocol (PPP) (v7 support, v5 not support)
- RFC 1662 PPP in HDLC-like Framing
- RFC 1700 ASSIGNED NUMBERS (v5 not support, v7 Obsoleted by RFC 3232)
- FEC 3232 Assigned Numbers (v7 support, v5 not support)
- RFC 1701 Generic Routing Encapsulation (v7 & v5)
- RFC 1702 Generic Routing Encapsulation over IPv4 networks (v7 support, v5 not support)
- RFC 1717 The PPP Multilink Protocol (MP) (v5 not support, v7 Obsoleted by RFC 1990) FEC 1990 The PPP Multilink Protocol (MP) (v7 support, v5 not support)
- RFC 1721 RIP-2 Analysis RFC 1722 RIP-2 Applicability
- RFC 1723 RIPv2 (v5 not support, v7 Obsoleted by RFC 2453)
- RFC 1724 RIP Version 2 MIB Extension (v7 support, v5 not support)
- RFC 1757 Remote Network Monitoring Management Information Base (v5 not support, v7 Obsoleted by RFC 2819)
- FEC 2819 Remote Network Monitoring Management Information Base (v7 support, v5 not support)
- RFC 1777 Lightweight Directory Access Protocol (v5 not support, v7 support)
- RFC 1812 IPv4 Routing (v5 not support, v7 support)
- RFC 1825 Security Architecture for the Internet Protocol
- RFC 1826 IP Authentication Header
- RFC 1827 IP Encapsulating Security Payload (ESP)
- RFC 1829 The ESP DES-CBC Transform

Technical Specifications

- RFC 1877 PPP Internet Protocol Control Protocol Extensions for Name Server Addresses
- RFC 1884 IP Version 6 Addressing Architecture
- RFC 1885 Internet Control Message Protocol (ICMPv6) for the Internet Protocol Version 6 (IPv6) Specification
- RFC 1886 DNS Extensions to support IP Version 6
- RFC 1889 RTP: A Transport Protocol for Real-Time Applications. Audio-Video Transport Working Group
- RFC 1933 Transition Mechanisms for IPv6 Hosts and Routers
- RFC 1945 Hypertext Transfer Protocol HTTP/1.0 (v7 support, v5 not support)
- RFC 1962 The PPP Compression Control Protocol (CCP)
- RFC 1966 BGP Route Reflection An alternative to full mesh IBGP (v5 not support, v7 Obsoleted by RFC 4456)
- RFC 1970 Neighbor Discovery for IP Version 6 (IPv6)
- RFC 1971 IPv6 Stateless Address Autoconfiguration
- RFC 1972 A Method for the Transmission of IPv6 Packets over Ethernet Networks
- RFC 1981 Path MTU Discovery for IP Version 6 (v7 support, v5 not support)
- RFC 1982 Serial Number Arithmetic
- RFC 1989 PPP Link Quality Monitoring (v7 support, v5 not support)
- RFC 1990 The PPP Multilink Protocol (MP) (v7 support, v5 not support)
- RFC 1994 PPP Challenge Handshake Authentication Protocol (CHAP) (v7 & v5)
- RFC 2001 TCP Slow Start, Congestion Avoidance, Fast Retransmit, and Fast Recovery Algorithms (v5 not support, v7 obsoleted by RFC 2581)
- RFC 2002 IP Mobility Support
- RFC 2003 IP Encapsulation within IP
- RFC 2011 SNMPv2 Management Information Base for the Internet Protocol using SMIv2 (v7 support, v5 not support)
- RFC 2012 SNMPv2 Management Information Base for the Transmission Control Protocol using SMIv2 (v5 not support, v7 Obsoleted by RFC 4022)
- RFC 2013 SNMPv2 Management Information Base for the User Datagram Protocol using SMIv2 (v5 not support, v7 Obsoleted by RFC 4113)
- RFC 2018 TCP Selective Acknowledgement Options (v7 support, v5 not support)
- RFC 2021 Remote Network Monitoring Management Information Base Version 2 using SMIv2 (v5 not support, v7 Obsoleted by RFC 4502)
- RFC 2073 An IPv6 Provider-Based Unicast Address Format (v7 & v5)
- RFC 2082 RIP-2 MD5 Authentication (v7 & v5)
- RFC 2085 HMAC-MD5 IP Authentication
- RFC 2091 Triggered Extensions to RIP to Support Demand Circuits (v7 support, v5 not support)
- RFC 2104 HMAC: Keyed-Hashing for Message Authentication
- RFC 2131 DHCP (v7 & v5)
- RFC 2132 DHCP Options and BOOTP Vendor Extensions (v7 & v5)
- RFC 2136 Dynamic Updates in the Domain Name System (DNS UPDATE) (v7 support, v5 not support)
- RFC 2138 Remote Authentication Dial In User Service (RADIUS) (v5 support, v7 Obsoleted by RFC 2865)
- RFC 2205 Resource Reservation Protocol (RSVP)—Version 1 Functional Specification (v7 & v5)
- RFC 2209 Resource Reservation Protocol (RSVP)—Version 1 Message Processing Rules (v7 support, v5 not support)
- RFC 2210 Use of RSVP (Resource Reservation Protocol) in Integrated Services
- RFC 2225 Classical IP and ARP over ATM (v7 support, v5 not support)
- RFC 2236 IGMP Snooping (v5 not support, v7 Obsoleted by RFC 4502)
- RFC 2246 The TLS Protocol Version 1.0 (v7 & v5)
- RFC 2251 Lightweight Directory Access Protocol (v3) (v7 support, v5 not support)
- RFC 2252 Lightweight Directory Access Protocol (v3): Attribute Syntax Definitions (v7 support, v5 not support)
- RFC 2283 MBGP (v5 support, v7 not support)
- RFC 2292 Advanced Sockets API for IPv6
- RFC 2309 Recommendations on queue management and congestion avoidance in the Internet (v5 & v7)
- RFC 2327 SDP: Session Description Protocol

Technical Specifications

- RFC 2338 VRRP (v5 support, v7 Obsoletes)
- RFC 3768 Virtual Router Redundancy Protocol (VRRP) Version 3 for IPv4 and IPv6 (Obsoletes RFC 2338)
- RFC 2344 Reverse Tunneling for Mobile IP
- RFC 2358 Definitions of Managed Objects for the Ethernet-like Interface Types (v5 support, v7 not support)
- RFC 2364 PPP Over AAL5 (v5 & v7)
- RFC 2365 Administratively Scoped IP Multicast (v5 support, v7 not support)
- RFC 2373 IP Version 6 Addressing Architecture (v5 support, v7 not support)
- RFC 2374 An IPv6 Aggregatable Global Unicast Address Format (v5 support, v7 not support)
- RFC 2375 IPv6 Multicast Address Assignments (v5 support, v7 not support)
- RFC 2385 Protection of BGP Sessions via the TCP MD5 Signature Option (v5 support, v7 not support)
- RFC 2427 Multiprotocol Interconnect over Frame Relay (v5 & v7)
- RFC 2428 FTP Extensions for IPv6 and NATs (v5 support, v7 not support)
- RFC 2433 Microsoft PPP CHAP (Challenge Handshake Authentication Protocol) Extensions (v7 support, v5 not support)
- RFC 2451 The ESP CBC-Mode Cipher Algorithms (v5 & v7)
- RFC 2452 IP Version 6 Management Information Base for the Transmission Control Protocol (v5 support, v7 Obsoletes)
- RFC 4022 Management Information Base for the Transmission Control Protocol (TCP) (Obsoletes RFC 2452, RFC 2012)
- RFC 2453 RIPv2 (v7 & v5)
- RFC 2454 IP Version 6 Management Information Base for the User Datagram Protocol (v5 support, v7 Obsoletes)
- RFC 4113 Management Information Base for the User Datagram Protocol (UDP) (Obsoletes RFC 2454, RFC 2013)
- RFC 2461 Neighbor Discovery for IP Version 6 (IPv6) (v5 support, v7 Obsoletes)
- RFC 4861 Neighbor Discovery for IP version 6 (IPv6) (Obsoletes RFC 2461)
- RFC 2462 IPv6 Stateless Address Autoconfiguration (v5 support, v7 Obsoletes)
- RFC 4862 IPv6 Stateless Address Autoconfiguration (Obsoletes RFC 2462)
- RFC 2463 Internet Control Message Protocol (ICMPv6) for the Internet Protocol Version 6 (IPv6) Specification (v5 support, v7 Obsoletes)
- RFC 4443 Internet Control Message Protocol (ICMPv6) for the Internet Protocol Version 6 (IPv6) Specification Obsoletes
- RFC 2463) (Updates RFC 2780) (Updated-By RFC 4884)
- RFC 2464 Transmission of IPv6 Packets over Ethernet Networks
- RFC 2465 Management Information Base for IP Version 6: Textual Conventions and General Group (v5 & v7)
- RFC 2466 Management Information Base for IP Version 6: ICMPv6 Group (v5 support, v7 Obsoletes)
- RFC 4293 Management Information Base for the Internet Protocol (IP) (Obsoletes RFC 2466)
- RFC 2516 A Method for Transmitting PPP Over Ethernet (PPPoE) (v5 & v7)
- RFC 2519 A Framework for Inter-Domain Route Aggregation (v5 support, v7 not support)
- RFC 2529 Transmission of IPv6 over IPv4 Domains without Explicit Tunnels (v5 & v7)
- RFC 2543 SIP: Session Initiation Protocol (v5 & v7)
- RFC 2548 (MS-RAS-Vendor only) (v5 & v7)
- RFC 2553 Basic Socket Interface Extensions for IPv6 (v5 support, v7 not support)
- RFC 2570 Introduction to Version 3 of the Internet-standard Network Management Framework (v5 support, v7 not support)
- RFC 2581 TCP Congestion Control (v5 not support, v7 Obsoleted by RFC 5681)
- RFC 2597 Assured Forwarding PHB Group
- RFC 2598 An Expedited Forwarding PHB (v5 & v7)
- RFC 2615 PPP over SONET/SDH (Synchronous Optical Network/Synchronous Digital Hierarchy) (v5 & v7)
- RFC 2616 HTTP Compatibility v1.1 (v5 & v7)
- RFC 2617 HTTP Authentication: Basic and Digest Access Authentication (v5 & v7)
- RFC 2618 RADIUS Authentication Client MIB (v5 & v7)
- RFC 2620 RADIUS Accounting Client MIB (v5 & v7)
- RFC 2644 Changing the Default for Directed Broadcasts in Routers (v5 & v7)
- RFC 2661 L2TP (v5 & v7)
- RFC 2663 NAT Terminology and Considerations (v5 & v7)

Technical Specifications

- RFC 2665 Definitions of Managed Objects for the Ethernet-like Interface Types (v5 support, v7 not support)
- RFC 2668 Definitions of Managed Objects for IEEE 802.3 Medium Attachment Units (MAUs) (v5 support, v7 not support)
- RFC 2675 IPv6 Jumbograms (v7 support, v5 not support)
- RFC 2684 Multiprotocol Encapsulation over ATM Adaptation Layer 5 (v7 support, v5 not support)
- RFC 2685 Virtual Private Networks Identifier (v7 support, v5 not support)
- RFC 2686 The Multi-Class Extension to Multi-Link PPP
- RFC 2694 DNS extensions to Network Address Translators (DNS_ALG) (v5 support, v7 not support)
- RFC 2698 A Two Rate Three Color Marker (v5 & v7)
- RFC 2702 Requirements for Traffic Engineering Over MPLS (v5 & v7)
- RFC 2711 IPv6 Router Alert Option (v7 support, v5 not support)
- RFC 2716 PPP EAP TLS Authentication Protocol (v5 & v7)
- RFC 2747 RSVP Cryptographic Authentication (v5 & v7)
- RFC 2763 Dynamic Name-to-System ID Mapping (v5 support, v7 Obsoletes)
- RFC 5301 Dynamic Hostname Exchange Mechanism for IS-IS (Obsoletes RFC 2763)
- RFC 2784 Generic Routing Encapsulation (GRE)
- RFC 2787 Definitions of Managed Objects for the Virtual Router Redundancy Protocol (v5 & v7)
- RFC 2827 Network Ingress Filtering: Defeating Denial of Service Attacks Which Employ IP Source Address Spoofing (v7 support, v5 not support)
- RFC 2833 RTP Payload for DTMF Digits, Telephony Tones and Telephony Signals
- RFC 2865 Remote Authentication Dial In User Service (RADIUS) (v7 & v5)
- RFC 2866 RADIUS Accounting (v5 & v7)
- RFC 2868 RADIUS Attributes for Tunnel Protocol Support (v5 & v7)
- RFC 2869 RADIUS Extensions (v5 & v7)
- RFC 2884 Performance Evaluation of Explicit Congestion Notification (ECN) in IP Networks. (v7 support, v5 not support)
- RFC 2894 Router Renumbering for IPv6 (v5 & v7)
- RFC 2917 A Core MPLS IP VPN Architecture (v5 support, v7 not support)
- RFC 2925 Definitions of Managed Objects for Remote Ping, Traceroute, and Lookup Operations (v5 & v7)
- RFC 2961 RSVP Refresh Overhead Reduction Extensions (v5 & v7)
- RFC 2963 A Rate Adaptive Shaper for Differentiated Services (v7 support, v5 not support)
- RFC 2965 HTTP State Management Mechanism (v5 & v7)
- RFC 2966 Domain-wide Prefix Distribution with Two-Level IS-IS (v5 support, v7 not support)
- RFC 2973 IS-IS Mesh Groups (v5 support, v7 not support)
- RFC 2976 The SIP INFO Method (v5 & v7)
- RFC 2993 Architectural Implications of NAT (v5 support, v7 not support)
- RFC 3011 The IPv4 Subnet Selection Option for DHCP (v7 support, v5 not support)
- RFC 3022 Traditional IP Network Address Translator (Traditional NAT) (v7 support, v5 not support)
- RFC 3024 Reverse Tunneling for Mobile IP, revised
- RFC 3025 Mobile IP Vendor/Organization-Specific Extensions
- RFC 3027 Protocol Complications with the IP Network Address Translator (v5 support, v7 not support)
- RFC 3031 Multiprotocol Label Switching Architecture (v5 & v7)
- RFC 3032 MPLS Label Stack Encoding (v5 & v7)
- RFC 3036 LDP Specification (v5 support, v7 not support)
- RFC 3037 LDP (Label Distribution Protocol) Applicability (v5 support, v7 not support)
- RFC 3041 Privacy Extensions for Stateless Address Autoconfiguration in IPv6 (v5 support, v7 Obsoletes)
- RFC 4941 Privacy Extensions for Stateless Address Autoconfiguration in IPv6 (Obsoletes RFC 3041)
- RFC 3046 DHCP Relay Agent Information Option (v5 & v7)
- RFC 3063 MPLS Loop Prevention Mechanism (v5 support, v7 not support)
- RFC 3097 RSVP (Resource Reservation Protocol) Cryptographic Authentication—Updated Message Type Value (v5 support, v7 not support)

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- RFC 3115 Mobile IP Vendor/Organization-Specific Extensions
- RFC 3137 OSPF Stub Router Advertisement (v5 & v7)
- RFC 3168 The Addition of Explicit Congestion Notification (ECN) to IP (v7 support, v5 not support)
- RFC 3176 InMon Corporation's sFlow: A Method for Monitoring Traffic in Switched and Routed Networks (v5 support, v7 not support)
- RFC 3209 RSVP-TE: Extensions to RSVP for LSP Tunnels (v7 & v5)
- RFC 3210 Applicability Statement for Extensions to RSVP for LSP-Tunnels (v7 & v5)
- RFC 3215 LDP State Machine (v5 & v7)
- RFC 3220 IP Mobility Support for IPv4
- RFC 3246 Expedited Forwarding PHB (v5 & v7)
- RFC 3261 SIP: Session Initiation Protocol (v5 & v7)
- RFC 3262 Reliability of Provisional Responses in Session Initiation Protocol (SIP) (v5 support, v7 not support)
- RFC 3263 Session Initiation Protocol (SIP): Locating SIP Servers (v5 support, v7 not support)
- RFC 3265 Session Initiation Protocol (SIP)—Specific Event Notification (v5 & v7)
- RFC 3268 Advanced Encryption Standard (AES) Ciphersuites for Transport Layer Security (TLS) (v5 support, v7 not support)
- RFC 3270 Multi-Protocol Label Switching (MPLS) Support of Differentiated Services (v5 support, v7 not support)
- RFC 3273 Remote Network Monitoring Management Information Base for High Capacity Networks (v5 support, v7 not support)
- RFC 3277 IS-IS Transient Blackhole Avoidance (v5 support, v7 not support)
- RFC 3279 Algorithms and Identifiers for the Internet X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile (v5 support, v7 not support)
- RFC 3280 Internet X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile (v5 support, v7 Obsoletes)
- RFC 5280 Internet X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile (Obsoletes
- RFC 3280, RFC 4325, RFC 4630)
- RFC 3306 Unicast-Prefix-based IPv6 Multicast Addresses (v5 support, v7 not support)
- RFC 3307 Allocation Guidelines for IPv6 Multicast Addresses (v5 support, v7 not support)
- RFC 3311 The Session Initiation Protocol (SIP) UPDATE Method (v5 & v7)
- RFC 3319 Dynamic Host Configuration Protocol (DHCPv6) Options for Session Initiation Protocol (SIP) Servers (v5 & v7)
- RFC 3323 A Privacy Mechanism for the Session Initiation Protocol (SIP) (v5 support, v7 not support)
- RFC 3325 Private Extensions to the Session Initiation Protocol (SIP) for Asserted Identity within Trusted Networks (v5 support, v7 not support)
- RFC 3326 The Reason Header Field for the Session Initiation Protocol (SIP) (v5 & v7)
- RFC 3344 IP Mobility Support for IPv4
- RFC 3345 Border Gateway Protocol (BGP) Persistent Route Oscillation Condition
- RFC 3359 Reserved Type, Length and Value (TLV) Codepoints in Intermediate System to Intermediate System (v5 support, v7 not support)
- RFC 3442 The Classless Static Route Option for Dynamic Host Configuration Protocol (DHCP) version 4 (v5 support, v7 not support)
- RFC 3443 Time To Live (TTL) Processing in Multi-Protocol Label Switching (MPLS) Networks (v5 support, v7 not support)
- RFC 3446 Anycast Rendevous Point (RP) mechanism using Protocol Independent Multicast (PIM) and Multicast Source Discovery Protocol (MSDP) (v5 support, v7 not support)
- RFC 3478 Graceful Restart Mechanism for Label Distribution Protocol (v5 & v7)
- RFC 3479 Fault Tolerance for the Label Distribution Protocol (LDP) (v5 & v7)
- RFC 3484 Default Address Selection for Internet Protocol version 6 (IPv6) (v5 support, v7 not support)
- RFC 3493 Basic Socket Interface Extensions for IPv6 (v5 support, v7 not support)
- RFC 3495 Dynamic Host Configuration Protocol (DHCP) Option for CableLabs Client Configuration
- RFC 3509 OSPF ABR Behavior (v5 support, v7 not support)
- RFC 3513 Internet Protocol Version 6 (IPv6) Addressing Architecture (v5 support, v7 Obsoletes)

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- RFC 4291 IP Version 6 Addressing Architecture (Obsoletes RFC 3513)
- RFC 3515 The Session Initiation Protocol (SIP) Refer Method (v5 & v7)
- RFC 3526 More Modular Exponential (MODP) Diffie-Hellman groups for Internet Key Exchange (IKE) (v5 & v7)
- RFC 3527 Link Selection sub-option for the Relay Agent Information Option for DHCPv4
- RFC 3542 Advanced Sockets Application Program Interface (API) for IPv6 (v5 support, v7 not support)
- RFC 3547 The Group Domain of Interpretation (v5 support, v7 not support)
- RFC 3564 Requirements for Support of Differentiated Services-aware MPLS Traffic Engineering (v5 & v7)
- RFC 3567 Intermediate System to Intermediate System (IS-IS) Cryptographic Authentication (v5 support, v7 not support)
- RFC 3569 An Overview of Source-Specific Multicast (SSM) (v5 & v7)
- RFC 3584 Coexistence between Version 1 and Version 2 of the Internet-standard Network Management Framework (v5 & v7)
- RFC 3587 IPv6 Global Unicast Address Format (v5 support, v7 not support)
- RFC 3590 Source Address Selection for the Multicast Listener Discovery (MLD) Protocol (v5 support, v7 not support)
- RFC 3596 DNS Extensions to Support IP Version 6 (v5 support, v7 not support)
- RFC 3602 The AES-CBC Cipher Algorithm and Its Use with IPSec (v5 & v7)
- RFC 3612 Applicability Statement for Restart Mechanisms for the Label Distribution Protocol (LDP) (v5 support, v7 not support)
- RFC 3618 Multicast Source Discovery Protocol (MSDP) (v5 & v7)
- RFC 3621 Power Ethernet MIB (v5 & v7)
- RFC 3623 Graceful OSPF Restart (v5 & v7)
- RFC 3630 Traffic Engineering (TE) Extensions to OSPF Version 2 (v5 & v7)
- RFC 3636 Definitions of Managed Objects for IEEE 802.3 Medium Attachment Units (MAUs) (v5 support, v7 not support)
- RFC 3646 DNS Configuration options for Dynamic Host Configuration Protocol for IPv6 (DHCPv6) (v5 & v7)
- RFC 3662 A Lower Effort Per-Domain Behavior (PDB) for Differentiated Services (v5 & v7)
- RFC 3704 Unicast Reverse Path Forwarding (URPF) (v7 support, v5 not support)
- RFC 3706 A Traffic-Based Method of Detecting Dead Internet Key Exchange (IKE) Peers (v5 & v7)
- RFC 3711 The Secure Real-time Transport Protocol (SRTP) (v5 support, v7 not support)
- RFC 3719 Recommendations for Interoperable Networks using Intermediate System to Intermediate System (IS-IS) (v5 & v7)
- RFC 3736 Stateless Dynamic Host Configuration Protocol (DHCP) Service for IPv6
- RFC 3737 IANA Guidelines for the Registry of Remote Monitoring (RMON) MIB (Management Information Base) modules
- RFC 3768 Virtual Router Redundancy Protocol (VRRP) (v5 & v7)
- RFC 3782 The NewReno Modification to TCP's Fast Recovery Algorithm
- RFC 3784 Intermediate System to Intermediate System (IS-IS) Extensions for Traffic Engineering (TE) (v5 & v7)
- RFC 3786 Extending the Number of IS-IS LSP Fragments Beyond the 256 Limit (v5 support, v7 not support)
- RFC 3787 Recommendations for Interoperable IP Networks using Intermediate System to Intermediate System (IS-IS) (v5 support, v7 not support)
- RFC 3809 Generic Requirements for Provider Provisioned Virtual Private Networks (VPNs)
- RFC 3810 Multicast Listener Discovery Version 2 (MLDv2) for IPv6 (v5 & v7)
- RFC 3811 Definitions of Textual Conventions (TCs) for Multiprotocol Label Switching (MPLS) Management (v5 support, v7 not support)
- RFC 3812 Multiprotocol Label Switching (MPLS) Traffic Engineering (TE) Management Information Base (MIB) (v5 & v7)
- RFC 3814 Multiprotocol Label Switching (MPLS) Forwarding Equivalence Class To Next Hop Label Forwarding Entry (FEC-To-NHLFE) Management Information Base (MIB) (v5 & v7)
- RFC 3815 Definitions of Managed Objects for the Multiprotocol Label Switching (MPLS), Label Distribution Protocol (LDP) (v5 & v7)
- RFC 3826 The Advanced Encryption Standard (AES) Cipher Algorithm in the SNMP User-based Security Model (v5 & v7)
- RFC 3847 Restart signaling for IS-IS (v5 support, v7 not support) RFC 3879 Deprecating Site Local Addresses (v5 support, v7 not support)

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- RFC 3898 Network Information Service (NIS) Configuration Options for Dynamic Host Configuration Protocol for IPv6 (DHCPv6)
- RFC 3906 Calculating Interior Gateway Protocol (IGP) Routes Over Traffic Engineering Tunnels
- RFC 3916 Requirements for Pseudo-wire Emulation Edge-to-Edge (PWE3)
- RFC 3917 Requirements for IP Flow Information Export (IPFIX)
- RFC 3942 Reclassifying Dynamic Host Configuration Protocol version 4 (DHCPv4) Options
- RFC 3948 UDP Encapsulation of IPSec ESP Packets
- RFC 3954 Cisco Systems NetFlow Services Export Version 9
- RFC 3973 Protocol Independent Multicast—Dense Mode (PIM-DM): Protocol Specification (Revised)
- RFC 3985 Pseudo Wire Emulation Edge-to-Edge (PWE3) Architecture
- RFC 4022 Management Information Base for the Transmission Control Protocol (TCP)
- RFC 4023 Encapsulating MPLS in IP or Generic Routing Encapsulation (GRE) (v7 not support, v5 support)
- RFC 4026 Provider Provisioned VPN terminology
- RFC 4061 Benchmarking Basic OSPF Single Router Control Plane Convergence (v7 not support, v5 support)
- RFC 4062 OSPF Benchmarking Terminology and Concepts (v7 not support, v5 support)
- RFC 4063 Considerations When Using Basic OSPF Convergence Benchmarks (v7 not support, v5 support)
- RFC 4075 Simple Network Time Protocol (SNTP) Configuration Option for DHCPv6
- RFC 4090 Fast Reroute Extensions to RSVP-TE for LSP Tunnels
- RFC 4105 Requirements for Inter-Area MPLS Traffic Engineering (v7 not support, v5 support)
- RFC 4109 Algorithms for Internet Key Exchange version 1 (IKEv1)
- RFC 4113 Management Information Base for the User Datagram Protocol (UDP)
- RFC 4124 Protocol Extensions for Support of DiffServ-aware MPLS Traffic Engineering
- RFC 4125 Maximum Allocation Bandwidth Constraints Model for DiffServ-aware MPLS Traffic Engineering
- RFC 4127 Russian Dolls Bandwidth Constraints Model for DiffServ-aware MPLS Traffic Engineering
- RFC 4133 Entity MIB (Version 3)
- RFC 4182 Removing a Restriction on the use of MPLS Explicit NULL (v7 not support, v5 support)
- RFC 4213 Basic Transition Mechanisms for IPv6 Hosts and Routers
- RFC 4214 Intra-Site Automatic Tunnel Addressing Protocol (ISATAP) (v7 Obsoletes)
- RFC 5214 Intra-Site Automatic Tunnel Addressing Protocol (ISATAP) (Obsoletes RFC 4214)
- RFC 4221 Multiprotocol Label Switching (MPLS) Management Overview (v7 not support, v5 support)
- RFC 4222 Prioritized Treatment of Specific OSPF Version 2 Packets and Congestion Avoidance (v7 not support, v5 support)
- RFC 4242 Information Refresh Time Option for Dynamic Host Configuration Protocol for IPv6 (DHCPv6) (v7 support, v5 not support)
- RFC 4244 An Extension to the Session Initiation Protocol (SIP) for Request History Information
- RFC 4250 The Secure Shell (SSH) Protocol Assigned Numbers
- RFC 4251 The Secure Shell (SSH) Protocol Architecture
- RFC 4252 The Secure Shell (SSH) Authentication Protocol
- RFC 4253 The Secure Shell (SSH) Transport Layer Protocol
- RFC 4254 The Secure Shell (SSH) Connection Protocol
- RFC 4272 BGP Security Vulnerabilities Analysis (v7 not support, v5 support)
- RFC 4291 IP Version 6 Addressing Architecture
- RFC 4292 IP Forwarding Table MIB
- RFC 4293 Management Information Base for the Internet Protocol (IP)
- RFC 4294 IPv6 Node Requirements (v7 Obsoletes)
- RFC 5095 Deprecation of Type 0 Routing Headers in IPv6 (Updates RFC 2460, RFC 4294)
- RFC 4305 Cryptographic Algorithm Implementation Requirements for Encapsulating Security Payload (ESP) and Authentication Header (AH) (v7 Obsoletes)
- RFC 4835 Cryptographic Algorithm Implementation Requirements for Encapsulating Security Payload (ESP) and Authentication Header (AH) (Obsoletes RFC 4305)

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- RFC 4306 Internet Key Exchange (IKEv2) Protocol (v7 not support, v5 support)
- RFC 4308 Cryptographic Suites for IPSec
- RFC 4361 Node-specific Client Identifiers for Dynamic Host Configuration Protocol Version Four (DHCPv4) (v7 not support, v5 support)
- RFC 4364 BGP/MPLS IP Virtual Private Networks (VPNs) (v7 Obsoletes)
- RFC 4577 OSPF as the Provider/Customer Edge Protocol for BGP/MPLS IP Virtual Private Networks (VPNs) (Updates RFC 4364)
- RFC 4365 Applicability Statement for BGP/MPLS IP Virtual Private Networks (VPNs) (v7 not support, v5 support)
- RFC 4377 Operations and Management (OAM) Requirements for Multi-Protocol Label Switched (MPLS) Networks (v7 not support, v5 support)
- RFC 4381 Analyses of the Security of BGP/MPLS IP VPNs (v7 not support, v5 support)
- RFC 4382 MPLS/BGP Layer 3 Virtual Private Network (VPN) Management Information Base (v7 support v5 not support)
- RFC 4384 BGP Communities for Data Collection
- RFC 4385 Pseudowire Emulation Edge-to-Edge (PWE3) Control Word for Use over an MPLS PSN
- RFC 4419 Diffie-Hellman Group Exchange for the Secure Shell (SSH) Transport Layer Protocol
- RFC 4443 Internet Control Message Protocol (ICMPv6) for the Internet Protocol Version 6 (IPv6) Specification
- RFC 4444 Management Information Base for Intermediate System to Intermediate System (IS-IS)
- RFC 4446 IANA Allocations for Pseudowire Edge to Edge Emulation (PWE3)
- RFC 4447 Pseudowire Setup and Maintenance Using the Label Distribution Protocol (LDP)
- RFC 4448 Encapsulation Methods for Transport of Ethernet over MPLS Networks
- RFC 4451 BGP MULTI_EXIT_DISC (MED) Considerations (v7 not support, v5 support)
- RFC 4486 Subcodes for BGP Cease Notification Message (v7 not support, v5 support)
- RFC 4502 Remote Network Monitoring Management Information Base Version 2
- RFC 4541 Considerations for Internet Group Management Protocol (IGMP) and Multicast Listener Discovery (MLD) Snooping Switches (v7 not support, v5 support)
- RFC 4552 Authentication/Confidentiality for OSPFv3 (v7 not support, v5 support)
- RFC 4553 Structure-Agnostic Time Division Multiplexing (TDM) over Packet (SAToP) (v7 not support, v5 support)
- RFC 4561 Definition of a Record Route Object (RRO) Node-Id sub-Objects (v7 support, v5 not support)
- RFC 4562 MAC-Forced Forwarding: A Method for Subscriber Separation on an Ethernet Access Network
- RFC 4568 Session Description Protocol (SDP) Security Descriptions for Media Streams
- RFC 4576 Using a Link State Advertisement (LSA) Options Bit to Prevent Looping in BGP/MPLS IP Virtual Private Networks (VPNs) (v7 not support, v5 support)
- RFC 4577 OSPF as the Provider/Customer Edge Protocol for BGP/MPLS IP Virtual Private Networks (VPNs)
- RFC 4594 Configuration Guidelines for DiffServ Service Classes
- RFC 4601 Protocol Independent Multicast—Sparse Mode (PIM-SM): Protocol Specification (Revised) (VPNs) (v7 Obsoletes)
- RFC 5059 Bootstrap Router (BSR) Mechanism for Protocol Independent Multicast (PIM) (Obsoletes RFC 2362) (Updates RFC 4601)
- RFC 4604 Using Internet Group Management Protocol Version 3 (IGMPv3) and Multicast Listener Discovery Protocol Version 2 (MLDv2) for Source-Specific Multicast
- RFC 4605 Internet Group Management Protocol (IGMP)/Multicast Listener Discovery (MLD)-Based Multicast Forwarding (“IGMP/MLD Proxying”)
- RFC 4607 Source-Specific Multicast for IP RFC 4608 Source-Specific Protocol Independent Multicast in 232/8
- RFC 4610 Anycast-RP Using Protocol Independent Multicast (PIM) (v7 support, v5 not support)
- RFC 4618 Encapsulation Methods for Transport of PPP/High-Level Data Link Control (HDLC) over MPLS Networks
- RFC 4619 Encapsulation Methods for Transport of Frame Relay over Multiprotocol Label Switching (MPLS) Networks
- RFC 4632 Classless Inter-domain Routing (CIDR): The Internet Address Assignment and Aggregation Plan (v7 support, v5 not support) Handshake for Intermediate System to Intermediate System (IS-IS) Point-to-Point Adjacencies
- RFC 3392 Support BGP capabilities adv
- RFC 4649 Dynamic Host Configuration Protocol for IPv6 (DHCPv6) Relay Agent Remote-ID Option (v7 support, v5 not support)

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- RFC 4659 BGP-MPLS IP Virtual Private Network (VPN) Extension for IPv6 VPN
- RFC 4664 Framework for Layer 2 Virtual Private Networks (L2VPNs)
- RFC 4665 Service Requirements for Layer 2 Provider-Provisioned Virtual Private Networks
- RFC 4717 Encapsulation Methods for Transport of Asynchronous Transfer Mode (ATM) over MPLS Networks
- RFC 4741 NETCONF Configuration Protocol
- RFC 4742 Using the NETCONF Configuration Protocol over Secure Shell (SSH) (v7 support, v5 not support)
- RFC 4743 Using NETCONF over the Simple Object Access Protocol (SOAP) (v7 support, v5 not support)
- RFC 4750 OSPF Version 2 Management Information Base
- RFC 4761 Virtual Private LAN Service (VPLS) Using BGP for Auto-Discovery and Signaling
- RFC 4765 Service Requirements for Layer 2 Provider Provisioned Virtual Private Networks (v7 not support, v5 support)
- RFC 4781 Graceful Restart Mechanism for BGP with MPLS
- RFC 4787 Network Address Translation (NAT) Behavioral Requirements for Unicast UDP
- RFC 4797 Use of Provider Edge to Provider Edge (PE-PE) Generic Routing Encapsulation (GRE) or IP in BGP/MPLS IP Virtual Private Networks
- RFC 4798 Connecting IPv6 Islands over IPv4 MPLS Using IPv6 Provider Edge Routers (6PE) (v7 not support, v5 support)
- RFC 4811 OSPF Out-of-Band Link State Database (LSDB) Resynchronization
- RFC 4812 OSPF Restart Signaling
- RFC 4813 OSPF Link-Local Signaling
- RFC 4816 Pseudowire Emulation Edge-to-Edge (PWE3) Asynchronous Transfer Mode (ATM) Transparent Cell Transport Service
- RFC 4818 RADIUS Delegated-IPv6-Prefix Attribute
- RFC 4835 Cryptographic Algorithm Implementation Requirements for Encapsulating Security Payload (ESP) and Authentication Header (AH)
- RFC 4861 Neighbor Discovery for IP version 6 (IPv6)
- RFC 4862 IPv6 Stateless Address Autoconfiguration
- RFC 4878 Definitions and Managed Objects for Operations, Administration, and Maintenance (OAM) Functions on
- RFC 4893 BGP Support for Four-octet AS Number Space
- RFC 4940 IANA Considerations for OSPF
- RFC 4941 Privacy Extensions for Stateless Address Autoconfiguration in IPv6
- RFC 5004 Avoid BGP Best Path Transitions from One External to Another RFC 5007 DHCPv6 Leasequery (v7 support, v5 not support)
- RFC 5015 Bidirectional Protocol Independent Multicast (BIDIR-PIM)
- RFC 5036 LDP Specification (v7 support, v5 not support)
- RFC 5060 Protocol Independent Multicast MIB
- RFC 5065 Autonomous System Confederations for BGP
- RFC 5072 IP Version 6 over PPP (v7 not support, v5 support)
- RFC 5082 The Generalized TTL Security Mechanism (GTSM) (v7 not support, v5 support)
- RFC 5085 Pseudowire Virtual Circuit Connectivity Verification (VCCV): A Control Channel for Pseudowires
- RFC 5086 Structure-Aware Time Division Multiplexed (TDM) Circuit Emulation Service over Packet Switched Network (CESoPSN)
- RFC 5095 Deprecation of Type 0 Routing Headers in IPv6
- RFC 5120 M-ISIS: Multi Topology (MT) Routing in Intermediate System to Intermediate Systems (IS-ISs)
- RFC 5130 A Policy Control Mechanism in IS-IS Using Administrative Tags
- RFC 5132 IP Multicast MIB (v7 not support, v5 support)
- RFC 5187 OSPFv3 Graceful Restart
- RFC 5214 Intra-Site Automatic Tunnel Addressing Protocol (ISATAP)
- RFC 5240 Protocol Independent Multicast (PIM) Bootstrap Router MIB
- RFC 5254 Requirements for Multi-Segment Pseudowire Emulation Edge-to-Edge (PWE3) (v7 support, v5 not support)
- RFC 5277 NETCONF Event Notifications

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- RFC 5280 Internet X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile
- RFC 5281 Extensible Authentication Protocol Tunneled Transport Layer Security Authenticated Protocol Version 0 (EAP-TTLSv0)
- RFC 5286 Basic Specification for IP Fast Reroute: Loop-Free Alternates
- RFC 5287 Control Protocol Extensions for the Setup of Time-Division Multiplexing (TDM) Pseudowires in MPLS Networks
- RFC 5301 Dynamic Hostname Exchange Mechanism for IS-IS
- RFC 5302 Domain-Wide Prefix Distribution with Two-Level IS-IS (v7 not support, v5 support)
- RFC 5303 Three-Way Handshake for IS-IS Point-to-Point Adjacencies (v7 not support, v5 support)
- RFC 5304 Intermediate System to Intermediate System (IS-IS) Cryptographic Authentication (v7 not support, v5 support)
- RFC 5305 IS-IS Extensions for Traffic Engineering (v7 Obsoletes)
- RFC 5307
- RFC 5306 Restart Signaling for IS-IS (v7 not support, v5 support)
- RFC 5308 Routing IPv6 with IS-IS
- RFC 5309 Point-to-Point Operation over LAN in Link State Routing Protocols (v7 not support, v5 support)
- RFC 5310 IS-IS Generic Cryptographic Authentication
- RFC 5359 Session Initiation Protocol Service Examples (v7 not support, v5 support)
- RFC 5381 Experience of Implementing NETCONF over SOAP (v7 support, v5 not support)
- RFC 5382 The IP Network Address Translator (NAT)
- RFC 5398 Autonomous System (AS) Number Reservation for Documentation Use (v7 not support, v5 support)
- RFC 5415 Control And Provisioning of Wireless Access Points (CAPWAP) Protocol Specification
- RFC 5416 Control and Provisioning of Wireless Access Points (CAPWAP) Protocol Binding for IEEE 802.11 RFC 5443 LDP IGP Synchronization (v7 not support, v5 support)
- RFC 5492 Capabilities Advertisement with BGP-4 (v7 support, v5 not support)
- RFC 5496 The Reverse Path Forwarding (RPF) Vector TLV (v7 support, v5 not support)
- RFC 5508 NAT Behavioral Requirements for ICMP
- RFC 5539 NETCONF over Transport Layer Security (TLS) (v7 support, v5 not support)
- RFC 5601 Pseudowire (PW) Management Information Base (MIB)
- RFC 5602 Pseudowire (PW) over MPLS PSN Management Information Base (MIB)
- RFC 5613 OSPF Link-Local Signaling (v7 not support, v5 support)
- RFC 5659 An Architecture for Multi-Segment Pseudowire Emulation Edge-to-Edge (v7 support, v5 not support)
- RFC 5681 TCP Congestion Control (v7 not support, v5 support)
- RFC 5798 Virtual Router Redundancy Protocol (VRRP) Version 3 for IPv4 and IPv6 (v7 support, v5 not support)
- RFC 5833 Control and Provisioning of Wireless Access Points (CAPWAP) Protocol Base MIB (v7 not support, v5 support)
- RFC 5834 Control and Provisioning of Wireless Access Points (CAPWAP) Protocol Binding MIB for IEEE 802.11 (v7 not support, v5 support)
- RFC 5880 Bidirectional Forwarding Detection
- RFC 5881 BFD for IPv4 and IPv6 (Single Hop)
- RFC 5881 Bidirectional Forwarding Detection (BFD) for IPv4 and IPv6 (Single Hop)
- RFC 5882 Generic Application of BFD
- RFC 5883 BFD for Multihop Paths
- RFC 5905 Network Time Protocol Version 4: Protocol and Algorithms Specification (v7 support, v5 not support)
- RFC 5969 IPv6 Rapid Deployment on IPv4 Infrastructures (6RD)—Protocol Specification
- RFC 6037 Cisco Systems' Solution for Multicast in MPLS/BGP IP VPNs (v7 support, v5 not support)

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IP Multicast

- RFC 1112 IGMP (v7 Obsoletes)
- RFC 2233 The Interfaces Group MIB using SMIv2 (Obsoletes RFC 1573) (Obsoleted by RFC 2863)
- RFC 2362 PIM Sparse Mode (v7 Obsoletes)
- RFC 5059 Bootstrap Router (BSR) Mechanism for Protocol Independent Multicast (PIM) (Obsoletes RFC 2362) (Updates RFC 4601)
- RFC 2710 Multicast Listener Discovery (MLD) for IPv6 (v7 Obsoletes)
- RFC 3810 Multicast Listener Discovery Version 2 (MLDv2) for IPv6 (Updates
- RFC 2710) (Updated—By RFC 4604)
- RFC 2934 Protocol Independent Multicast MIB for IPv4 (v7 not support, v5 support)
- RFC 3376 IGMPv3 (v7 Obsoletes)
- RFC 4604 Using Internet Group Management Protocol Version 3 (IGMPv3) and Multicast Listener Discovery Protocol Version 2 (MLDv2) for Source-Specific Multicast (Updates RFC 3376, RFC 3810)
- RFC 3376 IGMPv3 (host joins only)
- RFC 5059 Bootstrap Router (BSR) Mechanism for Protocol Independent Multicast (PIM)

IPV6

- RFC 2080 RIPng for IPv6 (v7 & v5)
- RFC 2460 IPv6 Specification (v7 & v5)
- RFC 2473 Generic Packet Tunneling in IPv6 (v7 & v5)
- RFC 2475 IPv6 DiffServ Architecture (v5 not support, v7 Updated—By RFC 3260)
- RFC 2529 Transmission of IPv6 Packets over IPv4 (v7 support, v5 not support)
- RFC 2545 Use of MP-BGP-4 for IPv6 (v7 & v5)
- RFC 2553 Basic Socket Interface Extensions for IPv6
- RFC 2740 OSPFv3 for IPv6 (v5 support, v7 Obsoleted by RFC 5340)
- RFC 2893 Transition Mechanisms for IPv6 Hosts and Routers (v5 support, v7 Obsoleted by RFC 4213)
- RFC 3056 Connection of IPv6 Domains via IPv4 Clouds (v7 & v5)
- RFC 3162 RADIUS and IPv6 (v7 & v5)
- RFC 3315 DHCPv6 (client and relay) (v5 not support, v7 Updated—By RFC 4361, RFC 5494)
- RFC 5340 OSPF for IPv6 (v7 support, v5 not support)

MIBs

- RFC 1213 MIB II (v7 & v5)
- RFC 1493 Bridge MIB (v5 support, v7 Obsoleted by RFC 4188)
- RFC 1724 RIPv2 MIB (v7 support, v5 not support)
- RFC 1850 OSPFv2 MIB (v5 support, v7 Obsoleted by RFC 4750)
- RFC 1907 SNMPv2 MIB (v5 not support, v7 Obsoleted by RFC 3418)
- RFC 2011 SNMPv2 MIB for IP (v5 not support, v7 Obsoleted by RFC 4293)
- RFC 2012 SNMPv2 MIB for TCP (v5 not support, v7 Obsoleted by RFC 4022)
- RFC 2013 SNMPv2 MIB for UDP (v5 not support, v7 Obsoleted by RFC 4113)
- RFC 2096 IP Forwarding Table MIB (v5 not support, v7 Obsoleted by RFC 4292)
- RFC 2233 Interfaces MIB (v5 not support, v7 Obsoleted by RFC 2863)
- RFC 2273 SNMP-NOTIFICATION-MIB
- RFC 2571 SNMP Framework MIB (v5 support, v7 Obsoleted by RFC 3411)
- RFC 2572 SNMP-MPD MIB (v5 not support, v7 Obsoleted by RFC 3412)
- RFC 2573 SNMP-Notification MIB (v5 not support, v7 Obsoleted by RFC 3413)
- RFC 2574 SNMP USM MIB (v5 support, v7 Obsoleted by RFC 3414)
- RFC 2674 802.1p and IEEE 802.1Q Bridge MIB
- RFC 2737 Entity MIB (Version 2) (v5 not support, v7 Obsoleted by RFC 4133)

Technical Specifications

- RFC 2863 The Interfaces Group MIB (v7 support, v5 not support)
- RFC 3813 MPLS LSR MIB (v7 support, v5 not support)

Network Management

- IEEE 802.1D (STP)
- RFC 1098 Simple Network Management Protocol (SNMP) (v5 not support, v7 Obsoleted by RFC 1157)
- RFC 1158 Management Information Base for network management of TCP/IP-based internets: MIB-II (v5 not support, v7 Obsoleted by RFC 1213)
- RFC 1212 Concise MIB definitions (v7 & v5)
- RFC 1215 Convention for defining traps for use with the SNMP (v5 support, v7 not support)
- RFC 1389 RIPv2 MIB Extension (v5 not support, v7 Obsoleted by RFC 1724)
- RFC 1448 Protocol Operations for version 2 of the Simple Network Management Protocol (SNMPv2)
- RFC 1450 Management Information Base (MIB) for version 2 of the Simple Network Management Protocol (SNMPv2)
- RFC 1902 Structure of Management Information for Version 2 of the Simple Network Management Protocol (SNMPv2) (v5 not support, v7 Obsoleted by RFC 2578)
- RFC 1903 SNMPv2 Textual Conventions (v5 not support, v7 Obsoleted by RFC 2579)
- RFC 1904 SNMPv2 Conformance (v5 not support, v7 Obsoleted by RFC 2580)
- IEEE 802.1D (STP)
- RFC 1098 Simple Network Management Protocol (SNMP) (v5 not support, v7 Obsoleted by RFC 1157)
- RFC 1158 Management Information Base for network management of TCP/IP-based internets: MIB-II (v5 not support, v7 Obsoleted by RFC 1213)
- RFC 1212 Concise MIB definitions (v7 & v5)
- RFC 1215 Convention for defining traps for use with the SNMP (v5 support, v7 not support)
- RFC 1389 RIPv2 MIB Extension (v5 not support, v7 Obsoleted by RFC 1724)
- RFC 1448 Protocol Operations for version 2 of the Simple Network Management Protocol (SNMPv2)
- RFC 1450 Management Information Base (MIB) for version 2 of the Simple Network Management Protocol (SNMPv2)
- RFC 1902 Structure of Management Information for Version 2 of the Simple Network Management Protocol (SNMPv2) (v5 not support, v7 Obsoleted by RFC 2578)
- RFC 1903 SNMPv2 Textual Conventions (v5 not support, v7 Obsoleted by RFC 2579)
- RFC 1904 SNMPv2 Conformance (v5 not support, v7 Obsoleted by RFC 2580)
- RFC 1905 SNMPv2 Protocol Operations (v5 not support, v7 Obsoleted by RFC 3416)
- RFC 1906 SNMPv2 Transport Mappings (v5 not support, v7 Obsoleted by RFC 3417)
- RFC 1908 Coexistence between Version 1 and Version 2 of the Internet-standard Network Management Framework
- RFC 1918 Private Internet Address Allocation
- RFC 2037 Entity MIB using SMIv2
- RFC 2261 An Architecture for Describing SNMP Management Frameworks
- RFC 2262 Message Processing and Dispatching for the Simple Network Management Protocol (SNMP)
- RFC 2263 SNMPv3 Applications
- RFC 2264 User-based Security Model (USM) for version 3 of the Simple Network Management Protocol (SNMPv3)
- RFC 2265 View-based Access Control Model (VACM) for the Simple Network Management Protocol (SNMP)
- RFC 2272 SNMPv3 Management Protocol
- RFC 2273 SNMPv3 Applications
- RFC 2274 USM for SNMPv3
- RFC 2275 VACM for SNMPv3
- RFC 2575 SNMPv3 View-based Access Control Model (VACM) (v5 support, v7 Obsoleted by RFC 3415)
- RFC 3164 BSD syslog Protocol (v5 not support, v7 Obsoleted by RFC 5424)
- RFC 5424 The Syslog Protocol (v7 support, v5 not support)
- RFC 3411 An Architecture for Describing Simple Network Management Protocol (SNMP) Management Frameworks (v7 support, v5 not support)

Technical Specifications

- RFC 3412 Message Processing and Dispatching for the Simple Network Management Protocol (SNMP) (v5 support, v7 Updated—By RFC 5590)
- RFC 3413 Simple Network Management Protocol (SNMP) Applications (v7 support, v5 not support)
- RFC 3414 SNMPv3 User-based Security Model (USM) (v5 not support, v7 Updated—By RFC 5590)
- RFC 3415 View-based Access Control Model (VACM) for the Simple Network Management Protocol (SNMP) (v7 support, v5 not support)
- RFC 3418 Management Information Base (MIB) for the Simple Network Management Protocol (SNMP) (v7 support, v5 not support)

OSPF

- RFC 1245 OSPF protocol analysis
- RFC 1246 Experience with OSPF
- RFC 1583 OSPFv2 (v5 support, v7 not support)
- RFC 1587 OSPF NSSA (v7 & v5)
- RFC 1765 OSPF Database Overflow (v7 & v5)
- RFC 1850 OSPFv2 Management Information Base (MIB), traps (v5 support, v7 Obsoleted by RFC 4750)
- RFC 2328 OSPFv2 (v5 support, v7 Updated—By RFC 5709)
- RFC 2370 OSPF Opaque LSA Option (v7 & v5)
- RFC 3101 OSPF NSSA (v7 support, v5 not support)
- RFC 5709 OSPFv2 HMAC-SHA Cryptographic Authentication (v7 support, v5 not support)

QoS/CoS

- IEEE 802.1P (CoS)
- RFC 2474 DS Field in the IPv4 and IPv6 Headers (v5 not support, v7 support)
- RFC 2475 DiffServ Architecture (v5 not support, v7 Updated—By RFC 3260)
- RFC 2597 DiffServ Assured Forwarding (AF) (v5 not support, v7 Updated—By RFC 3260)
- RFC 2598 DiffServ Expedited Forwarding (EF) (v5 not support, v7 Obsoleted by RFC 3246)
- RFC 2697 A Single Rate Three Color Marker (v7 support, v5 not support)
- RFC 3168 The Addition of Explicit Congestion Notification (ECN) to IP (v7 support, v5 not support)
- RFC 3247 Supplemental Information for the New Definition of the EF PHB (Expedited Forwarding Per-Hop Behavior) (v7 support, v5 not support)
- RFC 3260 New Terminology and Clarifications for DiffServ (v7 support, v5 not support)

Security

- IEEE 802.1X Port Based Network Access Control (v7 & v5)
- RFC 2082 RIP-2 MD5 Authentication (v7 & v5)
- RFC 2104 Keyed-Hashing for Message Authentication
- RFC 2138 RADIUS Authentication (v5 support, v7 Obsoleted by RFC 2865)
- RFC 2139 RADIUS Accounting (v5 support, v7 Obsoleted by RFC 2866)
- RFC 2408 Internet Security Association and Key Management Protocol (ISAKMP) (v7 support, v5 not support)
- RFC 2409 The Internet Key Exchange (IKE) (v7 support, v5 not support)
- RFC 2412 The OAKLEY Key Determination Protocol (v7 support, v5 not support)
- RFC 2459 Internet X.509 Public Key Infrastructure Certificate and CRL Profile
- RFC 2818 HTTP Over TLS (v7 support, v5 not support)
- RFC 2865 RADIUS Authentication (v7 & v5)
- RFC 2866 RADIUS Accounting (v7 & v5)
- RFC 3579 RADIUS Support For Extensible Authentication Protocol (EAP) (v7 support, v5 not support)
- RFC 3580 IEEE 802.1X Remote Authentication Dial In User Service (RADIUS) Usage Guidelines (v7 support, v5 not support)

Technical Specifications

VPN

- RFC 1828 IP Authentication using Keyed MD5
- RFC 1853 IP in IP Tunneling (v7 & v5)
- RFC 2401 Security Architecture for the Internet Protocol (v5 not support, v7 Obsoleted by RFC 4301)
- RFC 2402 IP Authentication Header (v5 not support, v7 Obsoleted by RFC 4302)
- RFC 2403 The Use of HMAC-MD5-96 within ESP and AH (v7 support, v5 not support)
- RFC 2404 The Use of HMAC-SHA-1-96 within ESP and AH
- RFC 2405 The ESP DES-CBC Cipher Algorithm With Explicit IV (v7 support, v5 not support)
- RFC 2406 IP Encapsulating Security Payload (ESP) (v5 not support, v7 Obsoleted by RFC 4303)
- RFC 2407 The Internet IP Security Domain of Interpretation for ISAKMP (v5 not support, v7 support)
- RFC 2410 The NULL Encryption Algorithm and Its Use With IPSec (v7 support, v5 not support)
- RFC 2411 IP Security Document Roadmap
- RFC 3948—UDP Encapsulation of IPSec ESP Packets (v7 support, v5 not support)
- RFC 4301—Security Architecture for the Internet Protocol (v7 support, v5 not support)
- RFC 4302—IP Authentication Header (AH) (v7 support, v5 not support)
- RFC 4303—IP Encapsulating Security Payload (ESP) (v7 support, v5 not support)
- RFC 4305—Cryptographic Algorithm Implementation Requirements for ESP and AH (v5 not support, v7 Obsoleted by RFC 4835)

Standards and Protocols (applies to JG732A model)

BGP

- RFC 1163 Border Gateway Protocol (BGP)
- RFC 1267 Border Gateway Protocol 3 (BGP-3)
- RFC 1657 Definitions of Managed Objects for BGPv4 (v5 support, v7 Obsoleted by RFC 4273)
- RFC 1771 BGPv4 (v5 support, v7 Obsoleted by RFC 4271)
- RFC 1772 Application of the BGP (v5 support, v7 not support)
- RFC 1773 Experience with the BGP-4 Protocol
- RFC 1774 BGP-4 Protocol Analysis
- RFC 1997 BGP Communities Attribute (v7 & v5)
- RFC 1998 An Application of the BGP Community Attribute in Multi-home Routing (v5 support, v7 not support)
- RFC 2385 BGP Session Protection via TCP MD5 (v5 support, v7 not support)
- RFC 2439 BGP Route Flap Damping (v7 & v5)

Denial of service protection

- CPU DoS Protection
- Rate Limiting by ACLs

Device management

- RFC 1305 NTPv3 (v7 support, v5 not support)
- RFC 1945 Hypertext Transfer Protocol—HTTP/1.0 (v7 support, v5 not support)
- RFC 2452 MIB for TCP6 (v5 support, v7 Obsoleted by RFC 4022)
- RFC 2454 MIB,l, for UDP6 (v5 support, v7 Obsoleted by RFC 4113)

General protocols

- IEEE 802.1p Priority
- IEEE 802.1Q VLANs (v5 not support, v7 support)
- IEEE 802.1s Multiple Spanning Trees
- IEEE 802.1w Rapid Reconfiguration of Spanning Tree
- RFC 768 UDP (v5 not support, v7 support)

Technical Specifications

- RFC 783 TFTP Protocol (revision 2)
- RFC 791 IP (v5 not support, v7 support)
- RFC 792 ICMP (v5 not support, v7 Updated—By RFC 0950)
- RFC 793 TCP (v5 not support, v7 Updated—By RFC 3168)
- RFC 826 ARP (v5 not support, v7 support)
- RFC 854 TELNET (v5 not support, v7 support)
- RFC 855 Telnet Option Specification
- RFC 856 TELNET (v5 not support, v7 support)
- RFC 858 Telnet Suppress Go Ahead Option
- RFC 894 IP over Ethernet (v5 not support, v7 support)
- RFC 925 Multi-LAN Address Resolution
- RFC 950 Internet Standard Subnetting Procedure (v5 not support, v7 support)
- RFC 959 File Transfer Protocol (FTP) (v5 not support, v7 Updated—By RFC 2228)
- RFC 1006 ISO transport services on top of the TCP: Version 3
- RFC 1027 Proxy ARP (v5 not support, v7 support)
- RFC 1034 Domain Concepts and Facilities (v5 not support, v7 support)
- IEEE 802.1p Priority
- RFC 1035 Domain Implementation and Specification (v5 not support, v7 Updated—By RFC 2136)
- RFC 1042 IP Datagrams
- RFC 1058 RIPv1 (v5 not support, v7 Updated—By RFC 1723)
- RFC 1071 Computing the Internet Checksum
- RFC 1091 Telnet Terminal-Type Option (v5 not support, v7 support)
- RFC 1122 Host Requirements
- RFC 1141 Incremental updating of the Internet checksum (v5 not support, v7 Updated—By RFC 1624)
- RFC 1142 OSI IS-IS Intra-domain Routing Protocol (v5 support, v7 not support)
- RFC 1144 Compressing TCP/IP headers for low-speed serial links (v5 support, v7 not support)
- RFC 1195 OSI ISIS for IP and Dual Environments (v5 & v7)
- RFC 1256 ICMP Router Discovery Protocol (IRDP) (v5 & v7)
- RFC 1293 Inverse Address Resolution Protocol (v5 support, v7 Obsoletes)
- RFC 2390 Inverse Address Resolution Protocol (Obsoletes RFC 1293)
- RFC 1315 Management Information Base for Frame Relay DTEs (v5 support, v7 not support)
- RFC 1332 The PPP Internet Protocol Control Protocol (IPCP)
- RFC 1333 PPP Link Quality Monitoring (v7 not support v5 support)
- RFC 1334 PPP Authentication Protocols (PAP) (v7 Obsoletes)
- RFC 1994 PPP Challenge Handshake Authentication Protocol (CHAP) (Obsoletes RFC 1334) (Updated—By RFC 2484)
- RFC 1349 Type of Service
- RFC 1350 TFTP Protocol (revision 2)
- RFC 1377 The PPP OSI Network Layer Control Protocol (OSINLCP) (v7 support, v5 not support)
- RFC 1381 SNMP MIB Extension for X.25 LAPB
- RFC 1471 The Definitions of Managed Objects for the Link Control Protocol of the Point-to-Point Protocol
- RFC 1472 The Definitions of Managed Objects for the Security Protocols of the Point-to-Point Protocol
- RFC 1490 Multiprotocol Interconnect over Frame Relay (v5 support, v7 Obsoleted by 2427)
- RFC 1519 CIDR (v5 not support, v7 obsoleted by RFC 4632)
- RFC 1534 DHCP/BOOTP Interoperation RFC 1542 Clarifications and Extensions for the Bootstrap Protocol (v7 support, v5 not support)
- RFC 1552 The PPP Internetworking Packet Exchange Control Protocol (IPXCP)
- RFC 1577 Classical IP and ARP over ATM (v5 not support, v7 Obsoleted by RFC 2225)
- RFC 1613 Cisco Systems X.25 over TCP (XOT)
- RFC 1624 Incremental Internet Checksum (v7 support, v5 not support)
- RFC 1631 NAT (v5 not support, v7 Obsoleted by RFC 3022)

Technical Specifications

- RFC 1638 PPP Bridging Control Protocol (BCP)
- RFC 1661 The Point-to-Point Protocol (PPP) (v7 support, v5 not support)
- RFC 1662 PPP in HDLC-like Framing
- RFC 1695 Definitions of Managed Objects for ATM Management Version 8.0 using SMIv2
- RFC 1701 Generic Routing Encapsulation
- RFC 1702 Generic Routing Encapsulation over IPv4 networks
- RFC 1721 RIP-2 Analysis
- RFC 1722 RIP-2 Applicability
- RFC 1723 RIP v2 (v5 not support, v7 Obsoleted by RFC 2453)
- RFC 1777 Lightweight Directory Access Protocol (v5 not support, v7 support)
- RFC 1795 Data Link Switching: Switch-to-Switch Protocol AIW DLSw
- RIG: DLSw Closed Pages, DLSw Standard Version 1
- RFC 1812 IPv4 Routing (v5 not support, v7 Updated—By RFC 2644)
- RFC 1829 The ESP DES-CBC Transform
- RFC 1877 PPP Internet Protocol Control Protocol Extensions for Name Server Addresses
- RFC 1944 Benchmarking Methodology for Network Interconnect Devices
- RFC 1973 PPP in Frame Relay
- RFC 1974 PPP Stac LZS Compression Protocol
- RFC 1990 The PPP Multilink Protocol (MP) (v5 not support, v7 support)
- RFC 1994 PPP Challenge Handshake Authentication Protocol (CHAP) (v5 not support, v7 support)
- RFC 2131 DHCP (v5 not support, v7 support)
- RFC 2136 Dynamic Updates in the Domain Name System (DNS UPDATE) (v5 not support, v7 support)
- RFC 2132 DHCP Options and BOOTP Vendor Extensions (v5 not support, v7 support)
- RFC 2166 APPN Implementer's Workshop Closed Pages Document DLSw v2.0 Enhancements
- RFC 2205 Resource Reservation Protocol (RSVP)—Version 1 Functional Specification (v5 not support, v7 Updated—By RFC 3936)
- RFC 2228 FTP Security Extensions (v5 not support, v7 support)
- RFC 2280 Routing Policy Specification Language (RPSL) (v5 not support, v7 support)
- RFC 2284 EAP over LAN (v7 Obsoletes)
- RFC 3748 Extensible Authentication Protocol (EAP) (Obsoletes RFC 2284)
- RFC 2338 VRRP
- RFC 2364 PPP Over AAL5
- RFC 2374 An Aggregatable Global Unicast Address Format (v7 not support v5 support)
- RFC 2451 The ESP CBC-Mode Cipher Algorithms
- RFC 2453 RIPv2
- RFC 2510 Internet X.509 Public Key Infrastructure Certificate Management Protocols (v7 not support v5 support)
- RFC 2511 Internet X.509 Certificate Request Message Format
- RFC 2516 A Method for Transmitting PPP Over Ethernet (PPPoE)
- RFC 2644 Directed Broadcast Control
- RFC 2661 L2TP
- RFC 2663 NAT Terminology and
- RFC 2661 L2TP
- RFC 2684 Multiprotocol Encapsulation over ATM Adaptation Layer 5 (v7 support, v5 not support)
- RFC 2694 DNS extensions to Network Address Translators (DNS_ALG)
- RFC 2702 Requirements for Traffic Engineering Over MPLS (v7 support, v5 not support)
- RFC 2747 RSVP Cryptographic Authentication (v5 support, v7 Updated-By RFC 3097)
- RFC 2763 Dynamic Name-to-System ID mapping support (v5 support, v7 obsoleted by 5301)
- RFC 2765 Stateless IP/ICMP Translation Algorithm (SIIT)
- RFC 2766 Network Address Translation—Protocol Translation (NAT-PT) (v5 support, v7 not support)
- RFC 2784 Generic Routing Encapsulation (GRE) (v7 & v5)

Technical Specifications

- RFC 2787 Definitions of Managed Objects for VRRP (v7 support, v5 not support)
- RFC 2961 RSVP Refresh Overhead Reduction Extensions (v7 support, v5 not support)
- RFC 2966 Domain-wide Prefix Distribution with Two-Level IS-IS (v5 support, v7 not support)
- RFC 2973 IS-IS Mesh Groups (v5 support, v7 not support)
- RFC 2993 Architectural Implications of NAT
- RFC 3022 Traditional IP Network Address Translator (Traditional NAT) (v7 support, v5 not support)
- RFC 3027 Protocol Complications with the IP Network Address Translator (v5 support, v7 not support)
- RFC 3031 Multiprotocol Label Switching Architecture (v5 & v7)
- RFC 3032 MPLS Label Stack Encoding (v5 support, v7 not support)
- RFC 3036 LDP Specification (v5 support, v7 not support)
- RFC 3046 DHCP Relay Agent Information Option (v5 & v7)
- RFC 3063 MPLS Loop Prevention Mechanism (v5 support, v7 not support)
- RFC 3065 Support AS confederation (v5 support, v7 Obsoletes)
- RFC 5065 Autonomous System Confederations for BGP (Obsoletes RFC 3065)
- RFC 3137 OSPF Stub Router Advertisement (v5 & v7)
- RFC 3209 RSVP-TE Extensions to RSVP for LSP Tunnels (v5 & v7)
- RFC 3210 Applicability Statement for Extensions to RSVP for LSP-Tunnels (v5 & v7)
- RFC 3212 Constraint-Based LSP setup using LDP (CR-LDP) (v5 support, v7 not support)
- RFC 3214 LSP Modification Using CR-LDP (v5 support, v7 not support)
- RFC 3215 LDP State Machine (v5 & v7)
- RFC 3268 Advanced Encryption Standard (AES) Ciphersuites for Transport Layer Security (TLS) (v5 support, v7 not support)
- RFC 3277 IS-IS Transient Blackhole Avoidance (v5 support, v7 not support)
- RFC 3279 Algorithms and Identifiers for the Internet X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile (v5 support, v7 not support)
- RFC 3280 Internet X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile
- RFC 5280 Internet X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile (Obsoletes
- RFC 3280, RFC 4325, RFC 4630)
- RFC 3392 Support BGP capabilities advertisement (v7 Obsoletes)
- RFC 5492 Capabilities Advertisement with BGP-4 (Obsoletes RFC 3392)
- RFC 3479 Fault Tolerance for the Label
- RFC 3564 Requirements for Support of Differentiated Services-aware MPLS Traffic Engineering
- RFC 3602 The AES-CBC Cipher Algorithm and Its Use with IPSec
- RFC 3706 A Traffic-Based Method of Detecting Dead Internet Key Exchange (IKE) Peers
- RFC 3784 ISIS TE support (v7 Obsoletes)
- RFC 5305 IS-IS Extensions for Traffic Engineering (Obsoletes RFC 3784) (Updated—By RFC 5307)
- RFC 3786 Extending the Number of IS-IS LSP Fragments Beyond the 256 Limit (v7 not support v5 support)
- RFC 3811 Definitions of Textual Conventions (TCs) for Multiprotocol Label Switching (MPLS) Management (v7 not support v5 support)
- RFC 3812 Multiprotocol Label Switching (MPLS) Traffic Engineering (TE)
- RFC 3847 Restart signaling for IS-IS (v5 support, v7 not support)
- FRF.1.2 PVC User-to-Network Interface (UNI) Implementation Agreement— July 2000
- FRF.11.1 Voice over Frame Relay Implementation Agreement—May 1997—Annex J added March 1999
- FRF.12 Frame Relay Fragmentation Implementation Agreement— December 1997
- FRF.16.1 Multilink Frame Relay UNI/NNI Implementation Agreement—May 2002
- FRF.2.2 Frame Relay Network-to-Network Interface (NNI) Implementation Agreement—March 2002
- FRF.20 Frame Relay IP Header Compression Implementation Agreement— June 2001
- FRF.3.2 Frame Relay Multiprotocol Encapsulation Implementation Agreement—April 2000
- FRF.7 Frame Relay PVC Multicast Service and Protocol Description—October 1994
- FRF.9 Data Compression Over Frame Relay Implementation Agreement—January 1996

Technical Specifications

IP multicast

- RFC 1112 IGMP (v5 not support, v7 Updated—By RFC 2236)
- RFC 2236 IGMPv2 (v5 not support, v7 Obsoleted by RFC 3376)
- RFC 2283 Multiprotocol Extensions for BGP-4 (v5 support, v7 not support)
- RFC 2362 PIM Sparse Mode (v5 not support, v7 Obsoleted by RFC 4601)
- RFC 2365 Administratively Scoped IP Multicast
- RFC 2710 Multicast Listener Discovery (MLD) for IPv6 (v5 support, v7 Obsoleted by RFC 3810)
- RFC 2934 Protocol Independent Multicast MIB for IPv4
- RFC 3376 IGMPv3 (v5 not support, v7 support)

IPv6

- RFC 1981 IPv6 Path MTU Discovery (v7 support, v5 not support)
- RFC 2080 RIPng for IPv6 (v7 & v5)
- RFC 2292 Advanced Sockets API for IPv6
- RFC 2373 IPv6 Addressing Architecture
- RFC 2460 IPv6 Specification (v7 & v5)
- RFC 2461 IPv6 Neighbor Discovery (v5 support, v7 Obsoleted by RFC 4861)
- RFC 2462 IPv6 Stateless Address Auto-configuration (v5 support, v7 Obsoleted by RFC 4862)
- RFC 2463 ICMPv6 (v5 support, v7 Obsoleted by RFC 4443)
- RFC 2464 Transmission of IPv6 over Ethernet Networks (v5 support, v7 not support)
- RFC 2472 IP Version 6 over PPP (v5 support, v7 Obsoleted by RFC 5072)
- RFC 2473 Generic Packet Tunneling in IPv6 (v7 & v5)
- RFC 2475 IPv6 DiffServ Architecture (v5 not support, v7 Updated—By RFC 3260)
- RFC 2529 Transmission of IPv6 Packets over IPv4 (v7 support, v5 not support)
- RFC 2553 Basic Socket Interface Extensions for IPv6
- RFC 2740 OSPFv3 for IPv6 (v5 support, v7 Obsoleted by RFC 5340)
- RFC 2893 Transition Mechanisms for IPv6 Hosts and Routers (v5 support, v7 Obsoleted by RFC 4213)
- RFC 3056 Connection of IPv6 Domains via IPv4 Clouds (v7 & v5)
- RFC 3513 IPv6 Addressing Architecture (v5 support, v7 Obsoleted by RFC 4291)
- RFC 3596 DNS Extension for IPv6
- RFC 2545 Use of MP-BGP-4 for IPv6 (v7 & v5)

MIBs

- RFC 1213 MIB II (v7 & v5)
- RFC 1229 Interface MIB Extensions
- RFC 1286 Bridge MIB (v5 not support, v7 Obsoleted by RFC 1493)
- RFC 1493 Bridge MIB (v5 support, v7 Obsoleted by RFC 4188)
- RFC 1573 SNMP MIB II (v5 not support, v7 Obsoleted by RFC 2233)
- RFC 1724 RIPv2 MIB (v7 support, v5 not support)
- RFC 1757 Remote Network Monitoring MIB
- RFC 1850 OSPFv2 MIB (v5 support, v7 Obsoleted by RFC 4750)
- RFC 2011 SNMPv2 MIB for IP (v5 not support, v7 Obsoleted by RFC 4293)
- RFC 2012 SNMPv2 MIB for TCP (v5 not support, v7 Obsoleted by RFC 4022)
- RFC 2013 SNMPv2 MIB for UDP (v5 not support, v7 Obsoleted by RFC 4113)
- RFC 2233 Interfaces MIB (v5 not support, v7 Obsoleted by RFC 2863)
- RFC 2454 IPV6-UDP-MIB (v5 support)
- RFC 4113 (v7 support)
- RFC 2465 IPv6 MIB (v5 support)
- RFC 4293 (v7 support)
- RFC 2466 ICMPv6 MIB (v5 support, v7 Obsoleted by RFC 4293)
- RFC 2618 RADIUS Client MIB (v7 support, v5 not support)

Technical Specifications

- RFC 2620 RADIUS Accounting MIB (v7 support, v5 not support)
- RFC 2674 802.1p and IEEE 802.1Q Bridge MIB
- RFC 2737 Entity MIB (Version 2) (v5 not support, v7 Obsoleted by RFC 4133)
- RFC 2863 The Interfaces Group MIB (v7 support, v5 not support)
- RFC 2933 IGMP MIB (v5 not support, v7 Obsoleted by RFC 5519)
- RFC 5519 Internet Group Management Protocol, Version 2 (v5 not support)
- RFC 3813 MPLS LSR MIB (v7 support, v5 not support)

Network management

- IEEE 802.1D (STP)
- RFC 1155 Structure of Management Information (v7 & v5)
- RFC 1157 SNMPv1 (v7 & v5)
- RFC 1905 SNMPv2 Protocol Operations (v5 not support, v7 Obsoleted by RFC 3416)
- RFC 2272 SNMPv3 Management Protocol
- RFC 2273 SNMPv3 Applications
- RFC 2274 USM for SNMPv3
- RFC 2275 VACM for SNMPv3
- RFC 2575 SNMPv3 View-based Access Control Model (VACM) (v5 support, v7 Obsoleted by RFC 3415)
- RFC 3164 BSD syslog Protocol (v5 not support, v7 Obsoleted by RFC 5424)

OSPF

- RFC 1245 OSPF protocol analysis
- RFC 1246 Experience with OSPF
- RFC 1587 OSPF NSSA (v7 & v5)
- RFC 1765 OSPF Database Overflow (v7 & v5)
- RFC 1850 OSPFv2 Management Information Base (MIB), traps (v5 support, v7 Obsoleted by RFC 4750)
- RFC 2328 OSPFv2 (v5 support, v7 Updated—By RFC 5709)
- RFC 2370 OSPF Opaque LSA Option (v7 & v5)
- RFC 3101 OSPF NSSA (v7 support, v5 not support)

QoS/CoS

- IEEE 802.1P (CoS)
- RFC 2474 DS Field in the IPv4 and IPv6 Headers (v5 not support, v7 support)
- RFC 2475 DiffServ Architecture (v5 not support, v7 Updated—By RFC 3260)
- RFC 2597 DiffServ Assured Forwarding (AF) (v5 not support, v7 Updated—By RFC 3260)
- RFC 2598 DiffServ Expedited Forwarding (EF) (v5 not support, v7 Obsoleted by RFC 3246)
- RFC 3168 The Addition of Explicit Congestion Notification (ECN) to IP (v7 support, v5 not support)

Technical Specifications

Security

- IEEE 802.1X Port Based Network Access Control
- RFC 1321 The MD5 Message-Digest Algorithm
- RFC 2082 RIP-2 MD5 Authentication (v7 & v5)
- RFC 2104 Keyed-Hashing for Message Authentication
- RFC 2138 RADIUS Authentication (v5 support, v7 Obsoleted by RFC 2865)
- RFC 2209 RSVP-Message Processing (v7 support, v5 not support)
- RFC 2246 Transport Layer Security (TLS) (v7 & v5)
- RFC 2716 PPP EAP TLS Authentication Protocol (v7 support, v5 not support)
- RFC 2865 RADIUS Authentication (v7 & v5)
- RFC 2866 RADIUS Accounting (v7 & v5)
- RFC 3567 Intermediate System (IS) to IS
- Cryptographic Authentication (v5 support, v7 not support)

VPN

- RFC 2403—HMAC-MD5-96 (v7 support, v5 not support)
- RFC 2404—HMAC-SHA1-96
- RFC 2405—DES-CBC Cipher algorithm (v7 support, v5 not support)
- RFC 2547 BGP/MPLS VPNs (v5 support; v7 Obsoleted by RFC 4364, Updated—By RFC 4577, RFC 4684, RFC 5462)
- RFC 2796 BGP Route Reflection—An Alternative to Full Mesh IBGP (v5 support) (v7 Obsoleted by RFC 4456)
- RFC 2842 Capabilities Advertisement with BGP-4 (v5 support, v7 not support)
- RFC 2858 Multiprotocol Extensions for BGP-4 (v5 support, v7 Obsoleted by RFC 4760)
- RFC 2918 Route Refresh Capability for BGP-4 (v7 & v5)
- RFC 3107 Carrying Label Information in BGP-4

IPSec

- RFC 1828 IP Authentication using Keyed MD5
- RFC 2401 IP Security Architecture (v5 not support, v7 Obsoleted by RFC 4301)
- RFC 2402 IP Authentication Header (v5 not support, v7 Obsoleted by RFC 4302)
- RFC 2406 IP Encapsulating Security Payload (v5 not support, v7 Obsoleted by RFC 4303)
- RFC 2407—Domain of interpretation (v5 not support, v7 support)
- RFC 2410—The NULL Encryption Algorithm and its use with IPSec (v7 support, v5 not support)
- RFC 2411 IP Security Document Roadmap
- RFC 2412—OAKLEY (v5 not support, v7 support)
- RFC 2865—Remote Authentication Dial In User Service (RADIUS) (v7 & v5)

IKEv1

- RFC 2865—Remote Authentication Dial In User Service (RADIUS) (v7 & v5)
- RFC 3748—Extensible Authentication Protocol (EAP) (v7 support, v5 not support)

Technical Specifications

IPSec

- RFC 1828 IP Authentication using Keyed MD5
- RFC 2401 IP Security Architecture
- RFC 2402 IP Authentication Header
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- RFC 2411 IP Security Document Roadmap
- RFC 2412 – OAKLEY
- RFC 2865 - Remote Authentication Dial In User Service (RADIUS)

IKEv1

- RFC 2865 - Remote Authentication Dial In User Service (RADIUS)
- RFC 3748 - Extensible Authentication Protocol (EAP)

Summary of Changes

Date	Version History	Action	Description of Change:
11-Apr-2022	Version 18	Changed	Technical Specifications section was updated.
04-Apr-2022	Version 17	Changed	Configuration Information and Technical Specifications sections were updated.
16-Aug-2021	Version 16	Changed	Configuration Information section was updated, obsolete SKUs were removed.
05-Feb-2018	Version 15	Changed	Minor edits on Technical Specification
05-Sep-2016	Version 14	Added	SKU added: JG742B
		Changed	Features and Benefits updated
01-Aug-2016	Version 13	Changed	Adding #AC3 Option on Configuration section Technical Specifications updated
06-Jun-2016	Version 12	Changed	Document name changed to HPE FlexNetwork MSR1000 Router Series Product description updated.
29-Apr-2016	Version 11	Changed	SKU descriptions updated on all the document. Accessories updated. Minor changes made on Technical Specifications.
31-Mar-2016	Version 10	Added	SKUs added: JH240A, JH226AAE, JH230AAE
		Changed	Features and Benefits updated
01-Dec-2015	Version 9	Changed	Overview and Technical Specifications updated
28-Aug-2015	Version 8	Changed	Minor edit on Technical Specification
17-Aug-2015	Version 7	Added	Added 1 new model: JH060A Added 1 new accessories: JG929A
		Changed	Updated Features and Benefits, Configuration and Technical Specifications
24-Feb-2015	Version 6	Changed	Minor change on Configuration section
06-Oct-2014	Version 5	Removed	Removed SKU JD572A
		Changed	Configuration section updated
18-Aug-2014	Version 4	Added	Added 1 new model: JG875A Added 7 new accessories: JG736A, JG737A, JG738A, JG739A, JG742A, JG743A, JG744A
		Changed	Content Edits
10-Jun-2014	Version 3	Added	New accessories added.
20-Mar-2014	Version 2	Changed	Configuration was added and Accessories were revised.
18-Feb-2014	Version 1	Created	Document creation

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