Hewlett Packard Enterprise

HPE FlexNetwork MSR Router Series

About the HPE MSR Router Series Command References

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About the HPE MSR Router Series Command References

These command references apply to the following models of the HPE MSR routers:

Model	
MSR954	• JH296A • JH297A • JH298A • JH299A
MSR1000	• MSR1002-4 • MSR1003-8S
MSR2000	• MSR2003 • MSR2004-24 • MSR2004-48
MSR3000	• MSR3012 • MSR3024 • MSR3044 • MSR3064
MSR4000	• MSR4060 • MSR4080

The HPE MSR router series command references describe the commands and command syntax options available for the HPE MSR router series.

Command reference	Content
Fundamentals Command Reference	Covers the commands for logging in to and setting up a router. This command reference includes: • CLI • RBAC • Login Management • FTP and TFTP • File System Management • Configuration file management • Software upgrade • ISSU • Emergency shell • Automatic Configuration • Device Management • Security zone • Tcl • Python
Virtual Technologies Command Reference	Covers Virtual Technologies commands. This command reference includes: • IRF
Interface Command Reference	Covers the interface configuration commands. This command reference includes: • Bulk interface • Ethernet interface • WAN interfaces

Command reference	Content
	• POS interface • CPOS interface • E-CPOS interface • Loopback and null interfaces
Layer 2—LAN Switching Command Reference	Covers the commands for configuring Layer 2 technologies and features in a LAN switched network. This command reference includes: • MAC address table • Ethernet interface aggregation • Port isolation • VLAN • QinQ • VLAN termination • Loop detection • Spanning tree • LLDP • Layer 2 forwarding
Layer 2—WAN Access Command Reference	Covers WAN access technologies. This command reference includes: • PPP • L2TP • HDLC • ISDN • ATM • Modem Management • 3G and 4G modem management • DDR • Frame Relay
Layer 3—IP Services Command Reference	Covers the commands for configuring and managing IP addressing (including static and dynamic IPv4 and IPv6 address assignment), network performance optimization, ARP, and interoperation between IPv4 and IPv6. This command reference includes: • ARP • IP Addressing • DHCP • DNS • NAT • IP Forwarding Basics • Fast Forwarding • Flow classification • Adjacency table • IRDP • IP Performance Optimization • UDP Helper • IPv6 Basics • DHCPv6 • IPv6 Fast Forwarding • Tunneling • GRE • ADVPN • WAAS • AFT

Command reference	Content
Layer 3—IP Routing Command Reference	Covers the commands for configuring routes for IPv4 and IPv6 networks of different sizes, route filtering, route control, and policy based routing. This command reference includes: • IP Routing Basics • Static Routing • RIP • OSPF • IS-IS • BGP • Policy-Based Routing • IPv6 Static Routing • RIPng • OSPFv3 • IPv6 IS-IS • IPv6 Policy-Based Routing • Routing policy • MTR
IP Multicast Command Reference	Covers the commands for Layer 3 IPv4 multicast protocols IGMP, PIM, MBGP, and Layer 3 IPv6 multicast protocols MLD, IPv6 PIM, MSDP, and IPv6 MBGP), Layer 2 IPv4 multicast protocols (IGMP snooping, and multicast VLAN), and Layer 2 IPv6 multicast protocols (MLD snooping and IPv6 multicast VLAN). This command reference includes: • IGMP Snooping • Multicast Routing and Forwarding • IGMP • PIM • MSDP • Multicast VPN • MLD snooping • IPv6 Multicast Routing and Forwarding • MLD • IPv6 PIM
MPLS Command Reference	This command reference includes: • Basic MPLS • Static LSP • LDP • MPLS TE • Static CRLSP • RSVP • Tunnel policy • MPLS L3VPN • MPLS L2VPN • VPLS • L2VPN access to L3VPN or IP backbone • MPLS OAM • MPLS protection switching
ACL and QoS Command Reference	Covers the commands for classifying traffic with ACLs, and allocating network resources and managing congestions with QoS or hierarchical QoS (HQoS) technologies to improve network performance and network use efficiency. This command reference includes: • ACL

Command reference	Content
	• QoS • MPLS QoS • FR QoS • Time range
Security Command Reference	Covers security feature commands. Available security features include identity authentication (AAA), access security (802.1X, MAC authentication, and portal), secure management (SSH), SSL, and attack protection (IP source guard, ARP attack protection, and URPF). This command reference includes: • AAA • 802.1X • MAC Authentication • Portal • Port security • User profile • Password control • Public key management • PKI • IPsec • SSH • SSL • ASPF • APR • Session management • Connection limit • Object group • Object policy • Attack detection and prevention • IP source guard • ARP attack protection • uRPF • Crypto engine • FIPS • mGRE
Voice Command Reference	Covers Voice features commands. This command reference includes: • Voice interface • Voice Entity • Dial Program • SIP • Call Services • Fax over IP • SRST • Customizable IVR
WLAN Command Reference	Covers WLAN commands. This command reference includes: • Radio management • WLAN access • WLAN security • WLAN authentication
High Availability Command Reference	Covers high availability commands for managing failure detection and failover. Failure detection technologies focus on fault detection and isolation. Failover technologies focus on network recovery. This

Command reference	Content
	command reference includes: • Interface backup • VRRP • BFD • Track • Process placement
Network Management and Monitoring Command Reference	Covers the commands that help you manage and monitor your network, for example, manage system events, collect traffic statistics, sample packets, assess network performance, and test network connectivity. This command reference includes: • System Maintenance and Debugging • NQA • NTP • PoE • SNMP • RMON • Event MIB • NETCONF • CWMP • EAA • Process monitoring and maintenance • Sampler • Mirroring • NetStream • IPv6 NetStream • sFlow • Information Center • Packet capture
OAA Command Reference	Covers the commands for logging in to an open application platform (OAP) card connected to your device and resetting the operating system of the OAP card. OAP cards use the open service architecture design, and enable you to provide custom services. • OAP module
EVI Command Reference	Covers EVI commands. This command reference includes: • EVI
OpenFlow Command Reference	Covers OpenFlow commands. This command reference includes: • OpenFlow
NEMO Command Reference	Covers NEMO commands. This command reference includes: • NEMO
Probe Command Reference	Covers Probe commands. This command reference includes: • Probe commands