

About the HP MSR2000/3000/4000 Configuration Guides

Part number: 5998-3985

Software version: CMW710-R0007P02

Document version: 6PW100-20130927



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About the HP MSR2000/3000/4000 Configuration Guides

These command references apply to the following models of the HP MSR2000/3000/4000 routers:

Model	
MSR2000	<ul style="list-style-type: none">• MSR2003
MSR3000	<ul style="list-style-type: none">• MSR3012• MSR3024• MSR3044• MSR3064
MSR4000	<ul style="list-style-type: none">• MSR4060• MSR4080

The HP MSR2000/3000/4000 configuration guides describe the software features for the HP MSR2000/3000/4000 Routers, and guide you through the software configuration procedures. These configuration guides also provide configuration examples to help you apply the software features to different network scenarios.

Configuration guide	Content
<i>Fundamentals Configuration Guide</i>	<p>Describes how to use the command line interface of the router, log in to and set up the router, and use the basic management functions. This guide includes:</p> <ul style="list-style-type: none">• CLI• RBAC• Login Management• FTP and TFTP• File System Management• Configuration file management• Software upgrade• Emergency shell• Automatic Configuration• Device Management• Tcl
<i>Interface Configuration Guide</i>	<p>Covers the configuration of various interfaces. This guide includes:</p> <ul style="list-style-type: none">• Bulk interface• Ethernet interface• WAN interfaces• POS interface• Loopback, null, and inloopback interface
<i>Layer 2—LAN Switching Configuration Guide</i>	<p>Covers Layer 2 technologies and features used on a LAN switched network, such as VLAN technology, port isolation, MSTP. You can use these features to divide broadcast domains, remove Layer 2 loops, isolate users within a VLAN, re-mark VLAN tags, implement VLAN VPNs over the Internet, and so</p>

Configuration guide	Content
	<p>on. This guide includes:</p> <ul style="list-style-type: none"> • MAC Address Table • Port Isolation • Spanning Tree • Loop detection • VLAN • LLDP
<p><i>Layer 2—WAN Access Configuration Guide</i></p>	<p>Covers WAN access technologies. This guide includes:</p> <ul style="list-style-type: none"> • PPP • L2TP • HDLC • ISDN • Modem Management • 3G modem • DDR
<p><i>Layer 3—IP Services Configuration Guide</i></p>	<p>Describes IP addressing (including static and dynamic IPv4 and IPv6 address assignment), network performance optimization, ARP, and interoperation between IPv4 and IPv6. This guide includes:</p> <ul style="list-style-type: none"> • ARP • IP Addressing • DHCP • DNS • NAT • IP Forwarding Basics • Fast Forwarding • Adjacency table • IP Performance Optimization • UDP Helper • IPv6 Basics • DHCPv6 • IPv6 Fast Forwarding • Tunneling • Flow classification
<p><i>Layer 3—IP Routing Configuration Guide</i></p>	<p>Covers the routing technologies for IPv4 and IPv6 networks of different sizes, route filtering, route control, and policy based routing. This guide includes:</p> <ul style="list-style-type: none"> • IP Routing Basics • Static Routing • RIP • OSPF • IS-IS • BGP • Policy-Based Routing • IPv6 Static Routing • RIPng

Configuration guide	Content
	<ul style="list-style-type: none"> • OSPFv3 • IPv6 IS-IS • IPv6 BGP • IPv6 Policy-Based Routing • Routing policy
<i>IP Multicast Configuration Guide</i>	<p>Covers Layer 3 IPv4 multicast protocols (IGMP and PIM), and Layer 3 IPv6 multicast protocols (MLD and IPv6 PIM), Layer 2 IPv4 multicast protocols (IGMP snooping). This guide includes:</p> <ul style="list-style-type: none"> • Multicast Overview • IGMP Snooping • Multicast Routing and Forwarding • IGMP • PIM • IPv6 Multicast Routing and Forwarding • MLD • IPv6 PIM • Multicast VPN
<i>MPLS Configuration Guide</i>	<p>This guide includes:</p> <ul style="list-style-type: none"> • Basic MPLS • Static LSP • LDP • MPLS TE • Static CRLSP • RSVP • Tunnel policy • MPLS L3VPN • MPLS OAM
<i>ACL and QoS Configuration Guide</i>	<p>Describes how to classify traffic with ACLs, and allocate network resources and manage congestions with QoS technologies to improve network performance and network use efficiency. You can use ACLs to help other function modules (such as QoS and IP routing) classify or filter traffic. This configuration guide includes:</p> <ul style="list-style-type: none"> • ACL • MPLS QoS • QoS • Time range
<i>Security Configuration Guide</i>	<p>Covers security features. The major security features available on the router include: identity authentication (AAA), access security (802.1X, MAC authentication, and portal), secure management (SSH). This guide includes:</p> <ul style="list-style-type: none"> • AAA • 802.1X • MAC Authentication • Password control • PKI • IPsec(IPsec, IKE) • Public Key

Configuration guide	Content
	<ul style="list-style-type: none"> • SSH • ASPF • APR • Session management • Connection limit • ARP Attack Protection • Crypto engine • Portal • FIPS
<i>Voice Configuration Guide</i>	<p>Covers Voice features. This guide includes:</p> <ul style="list-style-type: none"> • Voice interface • Voice Entity • Dial Program • SIP • Call Services
<i>High Availability Configuration Guide</i>	<p>Describes high availability technologies and features available on the router for failure detection and failover. Failure detection technologies focus on fault detection and isolation. Failover technologies focus on network recovery. This guide includes:</p> <ul style="list-style-type: none"> • VRRP • BFD • Track • Process placement
<i>Network Management and Monitoring Configuration Guide</i>	<p>Describes features 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 guide includes:</p> <ul style="list-style-type: none"> • System Maintenance and Debugging • NQA • NTP • SNMP • RMON • NETCONF • Mirroring • Sampler • NetStream • sFlow • Information Center • EAA • Process monitoring and maintenance
<i>Acronyms</i>	Lists the significant acronyms in the configuration guides.

Support and other resources

Contacting HP

For worldwide technical support information, see the HP support website:

<http://www.hp.com/support>

Before contacting HP, collect the following information:

- Product model names and numbers
- Technical support registration number (if applicable)
- Product serial numbers
- Error messages
- Operating system type and revision level
- Detailed questions

Subscription service

HP recommends that you register your product at the Subscriber's Choice for Business website:

<http://www.hp.com/go/wwalerts>

After registering, you will receive email notification of product enhancements, new driver versions, firmware updates, and other product resources.

Related information

Documents

To find related documents, browse to the Manuals page of the HP Business Support Center website:

<http://www.hp.com/support/manuals>

- For related documentation, navigate to the Networking section, and select a networking category.
- For a complete list of acronyms and their definitions, see *HP FlexNetwork Technology Acronyms*.

Websites

- HP.com <http://www.hp.com>
- HP Networking <http://www.hp.com/go/networking>
- HP manuals <http://www.hp.com/support/manuals>
- HP download drivers and software <http://www.hp.com/support/downloads>
- HP software depot <http://www.software.hp.com>
- HP Education <http://www.hp.com/learn>

Conventions

This section describes the conventions used in this documentation set.





Command conventions

Convention	Description
Boldface	Bold text represents commands and keywords that you enter literally as shown.
<i>Italic</i>	<i>Italic</i> text represents arguments that you replace with actual values.
[]	Square brackets enclose syntax choices (keywords or arguments) that are optional.
{ x y ... }	Braces enclose a set of required syntax choices separated by vertical bars, from which you select one.
[x y ...]	Square brackets enclose a set of optional syntax choices separated by vertical bars, from which you select one or none.
{ x y ... } *	Asterisk-marked braces enclose a set of required syntax choices separated by vertical bars, from which you select at least one.
[x y ...] *	Asterisk-marked square brackets enclose optional syntax choices separated by vertical bars, from which you select one choice, multiple choices, or none.
&<1-n>	The argument or keyword and argument combination before the ampersand (&) sign can be entered 1 to n times.
#	A line that starts with a pound (#) sign is comments.








GUI conventions

Convention	Description
Boldface	Window names, button names, field names, and menu items are in bold text. For example, the New User window appears; click OK .
>	Multi-level menus are separated by angle brackets. For example, File > Create > Folder .

Symbols

Convention	Description
 WARNING	An alert that calls attention to important information that if not understood or followed can result in personal injury.
 CAUTION	An alert that calls attention to important information that if not understood or followed can result in data loss, data corruption, or damage to hardware or software.
 IMPORTANT	An alert that calls attention to essential information.
NOTE	An alert that contains additional or supplementary information.
 TIP	An alert that provides helpful information.

Network topology icons

	Represents a generic network device, such as a router, switch, or firewall.
	Represents a routing-capable device, such as a router or Layer 3 switch.
	Represents a generic switch, such as a Layer 2 or Layer 3 switch, or a router that supports Layer 2 forwarding and other Layer 2 features.
	Represents an access controller, a unified wired-WLAN module, or the switching engine on a unified wired-WLAN switch.
	Represents an access point.
	Represents a security product, such as a firewall, a UTM, or a load-balancing or security card that is installed in a device.
	Represents a security card, such as a firewall card, a load-balancing card, or a NetStream card.

Port numbering in examples

The port numbers in this document are for illustration only and might be unavailable on your device.