

HP 5120 EI Switch Series

About the HP 5120 EI Configuration Guides

Part number: 5998-1777

Software version: Release 2220

Document version: 6W100-20130810



Legal and notice information

© Copyright 2013 Hewlett-Packard Development Company, L.P.

No part of this documentation may be reproduced or transmitted in any form or by any means without prior written consent of Hewlett-Packard Development Company, L.P.

The information contained herein is subject to change without notice.

HEWLETT-PACKARD COMPANY MAKES NO WARRANTY OF ANY KIND WITH REGARD TO THIS MATERIAL, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Hewlett-Packard shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

About the HP 5120 EI Configuration Guides

The HP 5120 EI configuration guides are part of the HP 5120 EI documentation set. They describe the software features for the HP 5120 EI Switch Series Release 2220, 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. The HP 5120 EI documentation set includes 10 configuration guides:

Configuration guide	Content
01 Fundamentals Configuration Guide	<p>Describes how to use the command line interface of the switch, log in to and set up the switch. This guide includes:</p> <ul style="list-style-type: none">• Using the CLI• Login overview• Logging in to the CLI• Logging in to the Web interface• Logging in through SNMP• Controlling user logins• Configuring FTP• Configuring TFTP• Managing the file system• Managing configuration files• Upgrading software• Managing the device• Automatic configuration
02 IRF Configuration Guide	<p>Describes the HP proprietary Intelligent Resilient Framework (IRF) technology, which provides data center class availability and scalability. IRF creates a fabric from multiple switches. The switches that form the IRF fabric work in 1:N redundancy and appear as one unit in the network. IRF improves management efficiency and streamlines network topologies. It is suitable for highly reliable enterprise networks and data centers.</p>
03 Layer 2 – LAN Switching Configuration Guide	<p>Covers Layer 2 technologies and features used on a LAN switched network, such as VLAN technology, port isolation, Spanning Tree. You can use these features to divide broadcast domains, remove Layer 2 loops, isolate users within a VLAN, remark VLAN tags, This guide includes:</p> <ul style="list-style-type: none">• Ethernet interface• Loopback and null interface• Bulk configuring interfaces• MAC address table• MAC Information• Ethernet link aggregation• Port isolation• Spanning tree protocols• BPDU tunneling• VLANs• Isolate-user-VLAN• Voice VLAN

Configuration guide	Content
	<ul style="list-style-type: none"> • GVRP • QinQ • LLDP • MVRP
04 Layer 3 – IP Services Configuration Guide	<p>Describes how to configure IP addressing, DHCP, IP performance optimization, ARP, DNS, IPv6 basics, DHCPv6, and Tunneling. This guide includes:</p> <ul style="list-style-type: none"> • ARP • Gratuitous ARP • Proxy ARP • ARP snooping • IP addressing • DHCP overview • DHCP server • DHCP relay agent • DHCP client • DHCP snooping • BOOTP client • IPv4 DNS • IRDP • Optimizing IP performance • UDP helper • IPv6 basics • DHCPv6 overview • DHCPv6 server • DHCPv6 relay agent • DHCPv6 client • DHCPv6 snooping • IPv6 DNS
05 Layer 3 – IP Routing Configuration Guide	<p>Covers the routing fundamentals and static routing configuration. This guide includes:</p> <ul style="list-style-type: none"> • IP routing basics • Static routing • IPv6 static routing
06 IP Multicast Configuration Guide	<p>Describes Layer 2 multicast fundamentals and configuration. This guide includes:</p> <ul style="list-style-type: none"> • Multicast overview • IGMP snooping • PIM snooping • Multicast VLANs • MLD snooping • IPv6 PIM snooping • IPv6 multicast VLANs

Configuration guide	Content
07 ACL and QoS Configuration Guide	<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. This guide includes:</p> <ul style="list-style-type: none"> • ACL • QoS overview • QoS configuration approaches • QoS policy • Priority mapping • Traffic policing, traffic shaping, and rate limit • Congestion management • Traffic filtering • Priority marking • Traffic redirecting • Class-based accounting • Data buffer • Appendix A Default priority mapping tables • Appendix B Packet precedences
08 Security Configuration Guide	<p>Covers security features. The major security features available on the switch include identity authentication (AAA), access security (802.1X, MAC authentication, portal, and port security), secure management (SSH), and attack protection (IP source guard, ARP attack protection, and URPF). This guide includes:</p> <ul style="list-style-type: none"> • AAA • 802.1X overview • 802.1X • EAD fast deployment • MAC authentication • Portal authentication • Triple authentication • Port security • User profile • Password control • HABP • Managing public keys • PKI • IPsec • IKE • SSH2.0 • SFTP • SCP • SSL • TCP attack protection • IP source guard • ARP attack protection • ND attack defense • SAVI

Configuration guide	Content
	<ul style="list-style-type: none"> • Blacklist • FIPS
09 High Availability Configuration Guide	<p>Describes high availability technologies and features available on the switch 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"> • High availability overview • Ethernet OAM • CFD • DLDP • RRPP • Smart Link • Monitor Link • Track
10 Network Management and Monitoring Configuration Guide	<p>Describes features that help you manage and monitor your network, for example, manage system events, sample packets, assess network performance, synchronize the clock for all devices with the clock in the network, supply power for attached devices by using PoE, and test network connectivity. This guide includes:</p> <ul style="list-style-type: none"> • Using ping, tracer, and system debugging • NTP • Information center • SNMP • RMON • Port mirroring • Traffic mirroring • NQA • sFlow • IPC • PoE • Cluster management • Stack