

SUPERSTACK® 3 SWITCH 3870 FAMILY MANAGEMENT QUICK REFERENCE GUIDE

Summary of Software Features

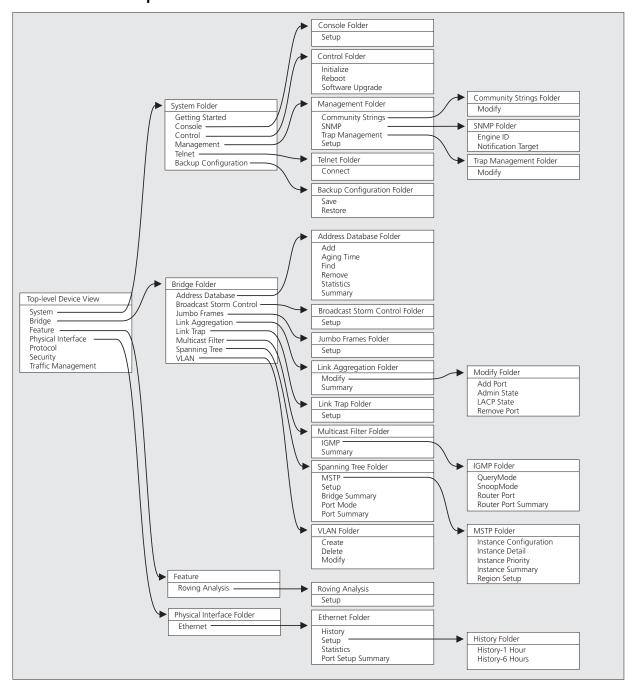
This table summarizes the software features that are supported by the Switch 3870 (24-port, Managed 10/100/1000 and 48-port, Managed 10/100/1000) Management Software Version 3.0.

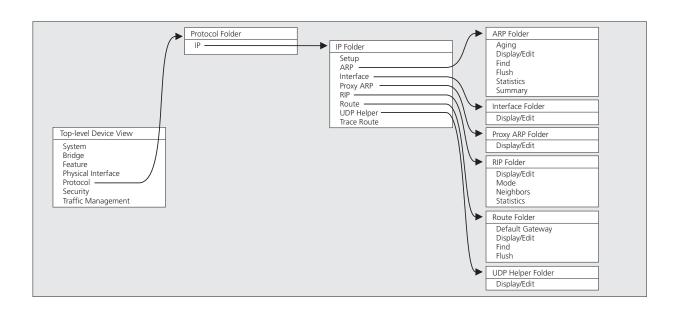
Feature	Description
IP Configuration	Manual or automatic using DHCP
Aggregated Links	Supported on 10/100/1000 and SFP ports
Link Aggregation Control Protocol (LACP)	Supported using the IEEE Std 802.3-2002 (incorporating 802.3ad)
Broadcast Storm Control	Supported
Virtual LANs (VLANs)	■ Support for up to 255 VLANs using the IEEE Std. 802.1Q-1998
	 Automatic VLAN assignment supported
Multicast Filtering	 255 multicast filter groups supported
	■ IGMP querying and IGMP snooping v1/v2 supported
Rapid Spanning Tree Protocol	Supported using the IEEE Std. 802.1w-2001 (compatible with STP)
	Multiple Spanning Tree Protocol (MSTP) supported
Traffic Prioritization/Classification	■ IEEE Std 802.1p supported
	DiffServ CodePoint (DSCP) based CoS supported
	TCP/UDP control supported
	■ NBX supported
Layer 3 Routing	 Routing Information Protocol (RIP v1/v2)
	 Static Routing, Trace Route, UDP Helper
RMON	Four groups supported: Statistics, History, Alarms, Event
Management	■ Web interface (HTTP and HTTPS)
	Command line interface (serial, Telnet and SSH)
	■ SNMP v1/v2/v3
Security	■ MAC port security
	■ Network login (IEEE802.1X)
	RADIUS supported
	■ RADIUS Authenticated Device Access (RADA) supported
Configuration Save and Restore	Supported
Roving Analysis	Port mirroring supported
Bandwidth Management	Rate limiting (1 Mbps resolution)

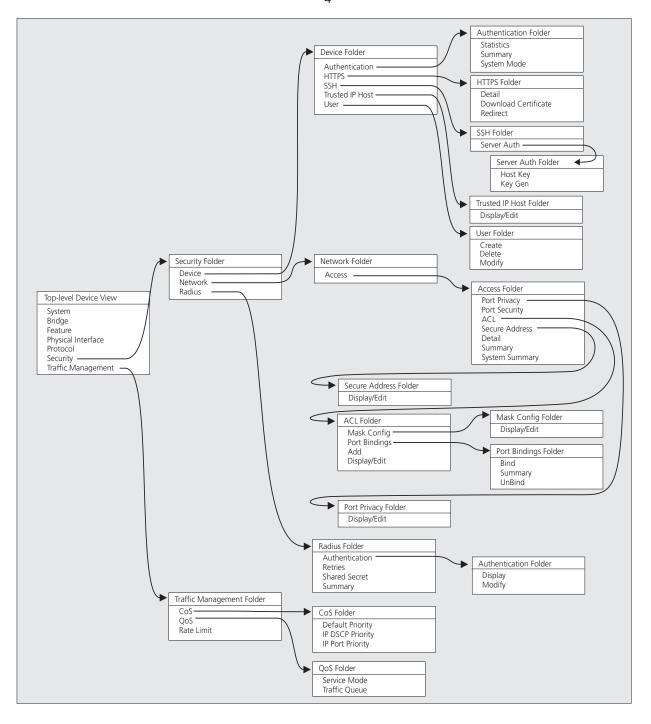


For more information on how each of these features operates on your Switch, refer to the Implementation Guide that is supplied on the CD-ROM that accompanies your Switch.

Web Interface Map - Device View

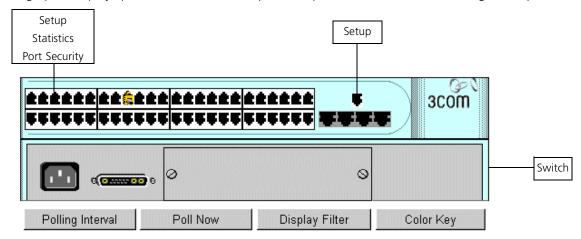






Web Interface Device Mimic

This graphic displays port status and allows quick setup for the network and management ports.



(Switch 3870 48 port device mimic shown)

A Quick Guide to the Web Interface Operations

This table describes the operations that are available on the Web interface.

Operation	Description
System Getting Started	Guides you through the initial configuration of the Switch.
System Console Setup	Configures the speed of a console port.
System Control Initialize	Initializes the Switch to factory default settings.
System Control Reboot	Resets the Switch.
System Control Software Upgrade	Upgrades the software on the Switch.
System Management Community Strings Modify	Changes current SNMP community strings.
System Management SNMP Engine ID	Sets the engine ID for the SNMP agent on the Switch.
System Management SNMP Notification Target	Adds, modifies, or deletes recipients for traps or inform messages.
System Management Trap Management Modify	Adds or removes a trap receiver.
System Management Setup	Changes descriptive information for the Switch.
System Telnet Connect	Starts a Telnet session to the Switch in a separate window.
System Backup Configuration Save	Saves the current configuration to a backup file on a TFTP server.
System Backup Configuration Restore	Restores the configuration from a a backup file on a TFTP server.
Bridge Address Database Add	Adds a MAC address to the database.
Bridge Address Database Aging Time	Configures the aging period for the MAC address database.
Bridge Address Database Find	Displays the location of a MAC address.
Bridge Address Database Remove	Deletes a MAC address from the database.
Bridge Address Database Statistics	Displays a summary of the MAC address database.

Outputing (Continued)	Description.
Operation (Continued)	Description
Bridge Address Database Summary	Displays all MAC addresses that are stored against a particular port or aggregated link.
Bridge Broadcast Storm Control Setup	Configures Broadcast Storm Control parameters for the stack.
Bridge Jumbo Frames Setup	Enables or disables jumbo frames on the Switch.
Bridge Link Aggregation Modify Add Port	Adds a port to an aggregated link.
Bridge Link Aggregation Modify Admin State	Changes the state of an aggregated link.
Bridge Link Aggregation Modify LACP State	Enables or disables LACP on a port.
Bridge Link Aggregation Modify Remove Port	Deletes a port from an aggregated link.
Bridge Link Aggregation Summary	Lists all aggregated links on the Switch.
Bridge Link Trap Setup	Enables or disables port link traps.
Bridge Multicast Filter IGMP QueryMode	Configures the Switch to be an IGMP querier.
Bridge Multicast Filter IGMP SnoopMode	Configures IGMP multicast learning for the Switch.
Bridge Multicast Filter IGMP Router Port	Configures ports to router ports.
Bridge Multicast Filter IGMP Router Port Summary	Displays the ports by which multicast routers can be reached.
Bridge Multicast Filter Summary	Lists currently active filter groups.
Bridge Spanning Tree MSTP Instance Configuration	Sets the members of MST instances.
Bridge Spanning Tree MSTP Instance Detail	Displays detailed summary information for a single MST instance.
Bridge Spanning Tree MSTP Instance Priority	Sets the MSTP priority for each MST instance.
Bridge Spanning Tree MSTP Instance Summary	Displays summary information for all MST instances.
Bridge Spanning Tree MSTP Region Setup	Names and changes the size of MST regions.
Bridge Spanning Tree Setup	Configures spanning tree parameters.
Bridge Spanning Tree Bridge Summary	Lists a summary of bridge configurations.
Bridge Spanning Tree Port Mode	Allows you to enable and disable spanning tree on each port.
Bridge Spanning Tree Port Summary	Lists a summary of port configurations.
Bridge VLAN Create	Creates a new VLAN.
Bridge VLAN Delete	Deletes an existing VLAN.
Bridge VLAN Modify	Modifies the port membership of an existing VLAN.
Feature Roving Analysis Setup	Configures the Roving Analysis feature.
Physical Interface Ethernet History History-1 Hour	Displays packet activity for all ports on the Switch for the past hour.
Physical Interface Ethernet History History-6 Hours	Displays packet activity for all ports on the Switch for the past 6 hours.
Physical Interface Ethernet Setup	Sets up single or multiple Ethernet ports.
Physical Interface Ethernet Statistics	Displays statistics for packet and error traffic on one or more ports.
Physical Interface Ethernet Port Setup Summary	Displays summary information for the Switch.
Protocol IP Setup	Configures the IP information for the Switch.
Protocol IP ARP Aging	Sets the amount of time that an entry stays in the ARP cache.
Protocol IP ARP Display/Edit	Displays and edits the current entries in the ARP cache.
Protocol IP ARP Find	Finds an ARP entry for a specific IP address.
Protocol IP ARP Flush	Removes all dynamic entries from the ARP cache.
Protocol IP ARP Statistics	Lists ARP requests and responses per port.
Protocol IP ARP Summary	Displays the used and available space in the ARP cache.

Operation (Continued)	Description
Protocol IP Interface Display/Edit	Displays and edits the Switch's IP interfaces.
Protocol IP Proxy ARP Display/Edit	Displays and edits Proxy ARP on the IP interfaces.
Protocol IP RIP Display/Edit	Displays and edits RIP routing on the IP interfaces.
Protocol IP RIP Mode	Configures global RIP settings.
Protocol IP RIP Neighbors	Lists RIP devices on the network.
Protocol IP RIP Statistics	Lists RIP communication on each IP interface.
Protocol IP Route Default Gateway	Displays and changes the default gateway.
Protocol IP Route Display/Edit	Displays and modifies routing entries.
Protocol IP Route Find	Finds learned routes to IP addresses.
Protocol IP Route Flush	Removes all learned routes from the routing table.
Protocol IP UDP Helper Display/Edit	Displays and modifies UDP helper entries.
Protocol IP Trace Route	Finds a route to a device.
Security Device Authentication Statistics	Lists the number of contacts made to RADIUS servers.
Security Device Authentication Summary	Displays details of RADIUS servers being used for authentication.
Security Device Authentication System Mode	Switches between local and RADIUS authentication.
Security Device HTTPS Detail	Displays the SSL certificate used for HTTPS management.
Security Device HTTPS Download Certificate	Downloads a new SSL certificate.
Security Device HTTPS Redirect	Redirects HTTP accesses to HTTPS accesses.
Security Device SSH Server Auth Host Key	Displays the SSH key.
Security Device SSH Server Auth Key Gen	Generates the SSH key.
Security Device Trusted IP Host Display/Edit	Restricts management access to specific IP addresses.
Security Device User Create	Creates a user.
Security Device User Modify	Modifies an existing user.
Security Device User Summary	Displays all configured users.
Security Network Access Port Privacy Display/Edit	Sets the SNMP community string required for management access through individual ports on the Switch.
Security Network Access Port Security	Sets the security mode of single or multiple ports on a Switch.
Security Network Access ACL Mask Config Display/Edit	Displays and edits subnet masks used in Access Control Lists.
Security Network Access ACL Port Bindings Bind	Binds one or all ports to a specific Access Control List.
Security Network Access ACL Port Bindings Summary	Lists ports bound to Access Control Lists.
Security Network Access ACL Port Bindings Unbind	Removes a port from an Access Control List.
Security Network Access ACL Add	Creates or edits an Access Control List.
Security Network Access ACL Display/Edit	Displays and edits an Access Control List.
Security Network Access Secure Address Display/Edit	Displays and edits the list of secure MAC addresses.
Security Network Access Detail	Displays summary information on port users.
Security Network Access Summary	Lists the security settings for each port.
Security Network Access System Summary	Displays details of RADIUS servers being used for authentication.
Security Radius Authentication Display	Displays a summary of RADIUS authentications.
Security Radius Authentication Modify	Changes the RADIUS server information.

Operation (Continued)	Description
Security Radius Retries	Changes the timeout and number of retries used when accessing a RADIUS server.
Security Radius Shared Secret	Creates or edits the shared secret used to authenticate with RADIUS servers.
Security Radius Summary	Displays a summary of RADIUS authentications.
Traffic Management CoS Default Priority	Sets the default priority for each port.
Traffic Management CoS IP DSCP Priority	Edits the relationships between DSCP and CoS priorities.
Traffic Management CoS IP Port Priority	Edits the relationships between IP port numbers and CoS priorities.
Traffic Management QoS Service Mode	Enables selection of Quality of Service (QoS) service mode type.
Traffic Management QoS Traffic Queue	Displays a summary of the QoS traffic queues.
Traffic Management Rate Limit	Limits the rate of traffic to or from a port.

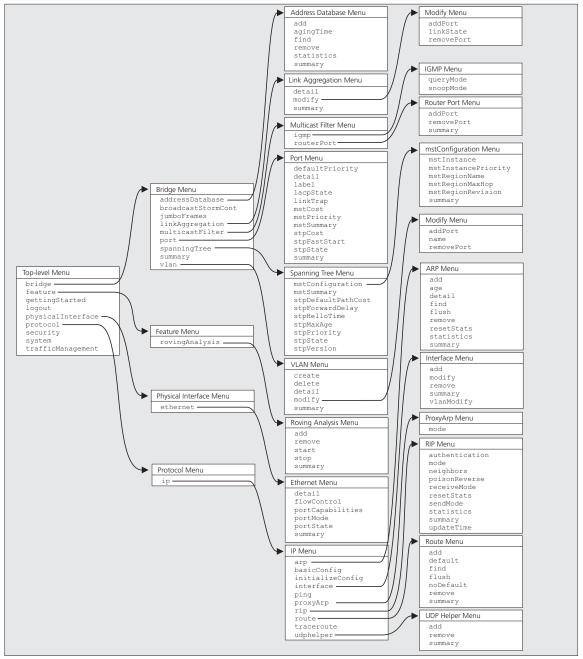


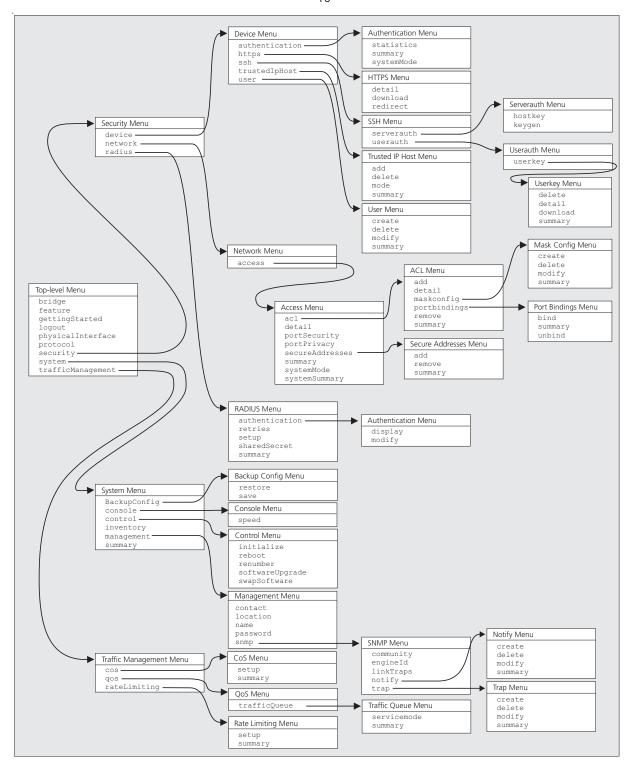
For detailed descriptions of the Web interface operations and the command line interface (CLI) commands that you require to manage the Switch, refer to the Management Interface Reference Guide supplied in HTML format on the CD-ROM that accompanies your Switch.

Command Line Interface Map

- **To display sub-menus:**At the *Select menu option* prompt, enter the name of the menu or menus.
- To display parent menus: At the Select menu option prompt, enter quit.

- To display the top-level menu: Press the [Esc] key.
- To obtain help: At the Select menu option prompt, enter ?.





A Quick Guide to the Command Line Interface Commands

This table describes the commands that are available on the command line interface.

Command	Description
bridge addressDatabase add	Adds a statically configured address.
bridge addressDatabase agingTime	Sets the bridge address aging time.
bridge addressDatabase find	Finds an address.
bridge addressDatabase remove	Removes an address.
bridge addressDatabase statistics	Displays statistical summary information on addresses.
bridge addressDatabase summary	Displays summary information on addresses.
bridge broadcastStormCont	Enables or disables broadcast storm control.
bridge jumboFrames	Enables or disables jumbo frames on the Switch.
bridge linkAggregation detail	Displays detailed information on an aggregated link.
bridge linkAggregation modify addPort	Adds a port to an aggregated link.
bridge linkAggregation modify linkState	Enables or disables an aggregated link.
bridge linkAggregation modify removePort	Removes a port from an aggregated link.
bridge linkAggregation summary	Displays summary information on an aggregated link.
bridge multicastFilter igmp queryMode	Enables or disables IGMP query mode.
bridge multicastFilter igmp snoopMode	Enables or disables IGMP multicast learning.
bridge multicastFilter routerPort addPort	Adds a statically configured router port.
bridge multicastFilter routerPort removePort	Removes a router port.
bridge multicastFilter routerPort summary	Displays summary information on a router port.
bridge port defaultPriority	Sets the default 802.1D priority for untagged frames.
bridge port detail	Displays detailed information on a port.
bridge port label	Labels a port with user defined text.
bridge port lacpState	Enables or disables LACP on a port.
bridge port linkTrap	Enables or disables port link traps.
bridge port mstCost	Sets the MSTP cost of a single port.
bridge port mstPriority	Sets the MSTP priority of a single port.
bridge port mstSummary	Displays a summary for one or more MST instances.
bridge port stpCost	Sets the spanning tree path cost parameter.
bridge port stpFastStart	Enables or disables spanning tree fast start.
bridge port stpState	Enables or disables spanning tree on a port.
bridge port summary	Displays summary information on a port.
<pre>bridge spanningTree mstConfiguration mstInstance</pre>	Adds or removes a member of an MST instance.
<pre>bridge spanningTree mstConfiguration mstInstancePriority</pre>	Sets the MST priority for all members of an MST instance.
bridge spanningTree mstConfiguration mstRegionName	Names the MST region containing the Switch.
bridge spanningTree mstConfiguration mstRegionMaxHop	Defines the size of an MST region by the number of hops to its edge.

Command (Continued)	Description
bridge spanningTree mstConfiguration mstRegionRevision	Changes the MST revision level for a region.
bridge spanningTree mstConfiguration summary	Displays summary information for all MST instances.
bridge spanningTree mstSummary	Displays detailed information for a single MST instance.
bridge spanningTree stpDefaultPathCost	Sets the bridge spanning tree default cost.
bridge spanningTree stpForwardDelay	Sets the bridge spanning tree forward delay parameter.
bridge spanningTree stpHelloTime	Sets the bridge spanning tree hello time parameter.
bridge spanningTree stpMaxAge	Sets the bridge spanning tree maximum age parameter.
bridge spanningTree stpPriority	Sets the bridge spanning tree priority parameter.
bridge spanningTree stpState	Enables or disables spanning tree on a bridge.
bridge spanningTree stpVersion	Selects the version of spanning tree to run on a bridge.
bridge summary	Displays bridge information for the Switch.
bridge vlan create	Creates a VLAN.
bridge vlan delete	Deletes a VLAN.
bridge vlan detail	Displays detailed information on a VLAN.
bridge vlan modify addPort	Adds a port to a VLAN.
bridge vlan modify name	Names a VLAN.
bridge vlan modify removePort	Removes a port from a VLAN.
bridge vlan summary	Displays summary information on a VLAN.
feature rovingAnalysis add	Configures the roving analysis port.
feature rovingAnalysis remove	Clears the roving analysis port.
feature rovingAnalysis start	Starts monitoring the roving analysis port.
feature rovingAnalysis stop	Stops monitoring the roving analysis port.
feature rovingAnalysis summary	Displays summary information on the roving analysis port.
gettingStarted	Guides you through the initial configuration of the stack.
logout	Logs out of the Command Line Interface.
physicalInterface ethernet detail	Displays detailed information on an Ethernet port.
physicalInterface ethernet flowControl	Enables or disables flow control.
physicalInterface ethernet portCapabilities	Sets the port capabilities.
physicalInterface ethernet portMode	Sets the port speed and duplex mode.
physicalInterface ethernet portState	Enables or disables an Ethernet port.
physicalInterface ethernet summary	Displays summary information on an Ethernet port.
protocol ip arp add	Manually adds an entry to the ARP cache.
protocol ip arp age	Sets the time that an entry stays in the ARP cache.
protocol ip arp detail	Displays the current entries in the ARP cache.
protocol ip arp find	Finds an ARP entry for a specific IP address.
protocol ip arp flush	Removes all dynamic entries from the ARP cache.
protocol ip arp remove	Removes a specific entry from the ARP cache.
protocol ip arp resetStats	Resets ARP cache statistics.
protocol ip arp statistics	Displays ARP cache statistics.

Command (Continued)	Description
protocol ip arp summary	Displays used and available space in the ARP cache.
protocol ip basicConfig	Performs basic IP management configuration.
protocol ip initializeConfig	Resets IP information to factory defaults.
protocol ip interface add	Adds an IP interface to the Switch.
protocol ip interface modify	Modifies IP interface information.
protocol ip interface remove	Removes an IP interface from the Switch.
protocol ip interface summary	Displays summary information on the IP interface.
protocol ip interface vlanModify	Changes the VLAN used to manage the Switch.
protocol ip ping	Polls remote devices.
protocol ip proxyArp mode	Enables or disables Proxy ARP on IP interfaces.
protocol ip rip authentication	Sets RIPv2 authentication mode and key.
protocol ip rip mode	Enables or disables global RIP operation.
protocol ip rip neighbors	Displays "well known" neighbors information.
protocol ip rip poisonReverse	Enables or disables poison reverse on the interface.
protocol ip rip receiveMode	Sets interface receive mode.
protocol ip rip resetStats	Resets RIP statistics.
protocol ip rip sendMode	Sets interface send mode.
protocol ip rip statistics	Displays RIP interface statistics.
protocol ip rip summary	Displays RIP information.
protocol ip rip updateTime	Sets the time of RIP updates transmission.
protocol ip route add	Adds a static route.
protocol ip route default	Defines the default route in the routing table.
protocol ip route find	Finds an existing route in the routing table.
protocol ip route flush	Removes all learned routes from the routing table.
protocol ip route noDefault	Removes the default route from the routing table.
protocol ip route remove	Removes an existing route.
protocol ip route summary	Displays summary information on the routing table.
protocol ip traceroute	Traces the route of IP packets.
protocol ip udpHelper add	Creates UDP helper servers.
protocol ip udpHelper remove	Removes a UDP helper.
protocol ip udpHelper summary	Displays settings for forwarded UDP protocol types.
security device authentication statistics	Displays authentication statistics.
security device authentication summary	Displays summary information on authentication.
security device authentication systemMode	Modifies the authentication mode.
security device https detail	Displays the HTTPS certificate.
security device https download	Downloads a new HTTPS certificate.
security device https redirect	Sets the Switch to always use HTTPS.
security device ssh serverauth hostkey	Displays the public host key.
security device ssh serverauth keygen	Generates a new key pair.

Command (Continued)	Description
security device ssh userauth userkey delete	Deletes a public key for the specified client.
security device ssh userauth userkey detail	Displays detailed information on a client's public key.
security device ssh userauth userkey download	Downloads a client's public key from a TFTP server.
security device ssh userauth userkey summary	Displays summary information for all the client public keys.
security device trustedIpHost add	Adds a trusted IP host or subnet.
security device trustedIpHost delete	Deletes an existing trusted IP host or subnet.
security device trustedIpHost mode	Enables or disables trusted IP hosts.
security device trustedIpHost summary	Lists trusted IP hosts.
security device user create	Creates a user.
security device user delete	Deletes a user.
security device user modify	Modifies a user.
security device user summary	Displays summary information on users.
security network access acl add	Adds an Access Control List rule.
security network access acl detail	Displays detailed information on Access Control Lists.
security network access acl maskconfig create	Defines the fields to check in the packet header.
security network access acl maskconfig delete	Deletes an Access Control List mask.
security network access acl maskconfig modify	Edits an Access Control List mask.
security network access acl maskconfig summary	Lists configured Access Control List masks.
security network access acl portbindings bind	Binds a port to an Access Control List.
security network access acl portbindings summary	Lists Access Control Lists in use by port.
security network access acl portbindings unbind	Unbinds a port from an Access Control List.
security network access acl remove	Removes an Access Control List rule.
security network access acl summary	Lists Access Control Lists.
security network access detail	Displays summary information on port users.
security network access portSecurity	Sets the port security operation mode and options.
security network access portPrivacy	Sets the SNMP community string required for management access through individual ports on the Switch.
security network access secureAddresses add	Adds a MAC address to the list of secure addresses.
security network access secureAddresses remove	Removes a MAC address from the list of secure addresses.
security network access secureAddresses summary	Displays a list of secure addresses.
security network access summary	Displays summary information on port security settings.
security network access systemMode	Enables or disables network security.
security network access systemSummary	Displays summary information on the system security settings.
security radius authentication display	Displays RADIUS authentication statistics.
security radius authentication modify	Modifies RADIUS authentication configuration.
security radius retries	Modifies RADIUS retry parameters.
security radius setup	Performs RADIUS configuration.
security radius sharedSecret	Modifies RADIUS security key.
security radius summary	Displays summary information on RADIUS.
system backupConfig restore	Restores the configuration of the Switch from a backup file.

Command (Continued)	Description
system backupConfig save	Saves the current configuration of the Switch to a backup file.
system console speed	Configures the port speed.
system control initialize	Resets to factory defaults.
system control reboot	Performs a system reboot.
system control renumber	Renumbers the Switch(es) in a stack starting from the top unit
system control softwareUpgrade	Performs an agent software upgrade.
system control swapSoftware	Changes to standby agent software.
system inventory	Displays stack information.
system management contact	Sets the system contact.
system management location	Sets the system location.
system management name	Sets the system name.
system management password	Sets the system password.
system management snmp community	Sets the SNMP community string.
system management snmp engineId	Sets the engine ID for the SNMP agent on the Switch.
system management snmp linkTraps	Enables or disables link up or link down traps.
system management snmp notify create	Adds recipients for traps or inform messages.
system management snmp notify delete	Deletes recipients for traps or inform messages.
system management snmp notify modify	Modifies recipients for traps or inform messages.
system management snmp notify summary	Displays recipients for traps or inform messages.
system management snmp trap create	Creates a trap destination.
system management snmp trap delete	Deletes a trap destination.
system management snmp trap modify	Modifies a trap destination.
system management snmp trap summary	Displays summary information on a trap destination.
system summary	Displays a summary of system information.
trafficManagement cos setup	Starts the CoS configuration wizard.
trafficManagement cos summary	Displays CoS summary information.
trafficManagement qos trafficQueue serviceMode	Enables selection of Quality of Service (QoS) mode type.
trafficManagement qos trafficQueue summary	Displays a summary of the QoS traffic queues.
trafficManagement rateLimiting setup	Starts the rate limiting configuration wizard.
trafficManagement rateLimiting summary	Displays rate limiting summary information.



For detailed descriptions of the Web interface operations and the command line interface (CLI) commands that you require to manage the Switch, refer to the Management Interface Reference Guide supplied in HTML format on the CD-ROM that accompanies your Switch.

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