



# CHAPTER 2

## Command Groups

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Chapter 3, “Commands,” describes all commands for all currently supported server switches in alphabetical order. This chapter groups commands for those who prefer a more structured organization.

- The “[Command Modes and Submodes](#)” section on page 2-1 identifies the commands that are available in each of the command modes and submodes.
- The “[show Commands](#)” section on page 2-11 lists a specific subset of commands used for displaying information about the server switch.
- The “[Cisco SFS 3000-Series Only Commands](#)” section on page 2-15 lists the commands that are available on the Cisco SFS 3001, Cisco SFS 3012, Cisco SFS 3012R, and Cisco SFS 3504 server switches only. Users of Cisco SFS 7000, Cisco SFS 7000P, Cisco SFS 7008, Cisco SFS 7008P, Cisco SFS 7000D, and Cisco 4x InfiniBand Switch Module for IBM Blade Server should ignore these commands.

## Command Modes and Submodes

This section lists commands according to the command mode or command submode in which you can enter them:

- [User EXEC Mode Commands, page 2-2](#)
- [Privileged EXEC Mode Commands, page 2-2](#)
- [Global Configuration Mode Commands, page 2-3](#)
- [Ethernet Interface Configuration Submode Commands, page 2-6](#)
- [InfiniBand Interface Configuration Submode Commands, page 2-7](#)
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- [Gateway Interface Configuration Mode Commands, page 2-9](#)
- [Ethernet Management Configuration Submode Commands, page 2-9](#)
- [InfiniBand Management Interface Configuration Submode Commands, page 2-10](#)
- [Card Configuration Mode Commands, page 2-10](#)
- [Commands for Diagnostic Submodes, page 2-11](#)

## User EXEC Mode Commands

Table 2-1 lists the commands that are available in user EXEC mode.

**Table 2-1 User EXEC Mode Commands**

Command Name	Function
broadcast	Sends text messages to all other CLI users.
enable (user EXEC mode)	Enters privileged EXEC mode from user EXEC mode.
exit	Logs out of the server switch.
help	Views the help options that the CLI provides in the current mode.
history	Displays a list of the commands that you executed during your CLI session.
login	Changes user identity during a CLI session.
logout	Logs out of the current CLI session.
ping	Verifies that your server switch can reach a given host.
show Commands	Displays extensive configuration and status information about various aspects of the server switch.
terminal	Configures the maximum number of lines per command that appear on the terminal screen and the duration of idle time that triggers your server switch to automatically log you out and end your CLI session
who	Displays current usernames and the hostnames of the hosts from which the users are logged in.
write	Sends a text message to another CLI user.

## Privileged EXEC Mode Commands

Table 2-2 lists the commands that are available in privileged EXEC mode.

**Table 2-2 Privileged EXEC Mode Commands**

Command Name	Function
broadcast	Sends text messages to all other CLI users.
clear counters	Clears the counters associated with a given InfiniBand port or range of ports.
clock set	Manually configures the time and date of the on-board server switch clock.
configure terminal	Enters global configuration mode.
copy	Copies files to or from your server switch from a remote location, or from one directory on your server switch to another directory on the same server switch.
delete	Removes image files, configuration files, or log files from your server switch.
dir	Lists the configuration files, log files, and system image files on your server switch.

**Table 2-2** Privileged EXEC Mode Commands (continued)

Command Name	Function
disable (privileged EXEC mode)	Exits privileged EXEC mode and return to user EXEC mode.
exec	Executes a file in the config file system on your server switch.
exit	Returns to user EXEC mode.
help	Views the help options that the CLI provides in the current mode.
history	Displays a list of the commands that you executed during your CLI session.
install	Installs an image file on your server switch.
login	Changes user identity during a CLI session.
logout	Logs out of the current CLI session.
more	Displays the contents of a text file on your terminal screen.
ping	Verifies that your server switch can reach a given host.
reload	Reboots your server switch.
save-log	Saves the system log file under a different file name.
show Commands	Displays extensive configuration and status information about various aspects of the server switch.
terminal	Configures the maximum number of lines per command that appear on the terminal screen and the duration of idle time that triggers your server switch to automatically log you out and end your CLI session
who	Displays current usernames and the hostnames of the hosts from which they are logged in.
write	Sends a text message to another CLI user.

## Global Configuration Mode Commands

Table 2-3 lists the commands that are available in global configuration mode.

**Table 2-3** Global Configuration Mode Commands

Command Name	Function
aaa accounting	Configures methods of AAA accounting.
aaa authorization	Sets the location from where AAA authorization is obtained, and sets default read-write privileges for InfiniBand, IP Ethernet, and Fiber Channel.
authentication	Configures the user authentication methods to be local, local and then RADIUS, RADIUS and then local, local and then TACACS+, TACACS+ and then local, RADIUS, or TACACS+.
boot-config	Specifies the system image to run when your server switch boots.
bridge-group (global configuration mode)	Creates and configures bridge groups.

**Table 2-3 Global Configuration Mode Commands (continued)**

Command Name	Function
<code>bridge-group broadcast-forwarding</code>	Enables or disables broadcast forwarding for a selected bridge group.
<code>bridge-group directed-broadcast</code>	Enables directed broadcast for a bridge group.
<code>bridge-group eth-next-hop</code>	Creates or removes an IPv4 Ethernet route for a bridge group.
<code>bridge-group gratuitous-igmp</code>	Enables or disables gratuitous IGMP for a selected bridge group.
<code>bridge-group ib-next-hop</code>	Creates or removes an IPv4 InfiniBand route for a bridge group.
<code>bridge-group igmp</code>	Sets the IGMP version for the selected bridge group.
<code>bridge-group ip-addr</code>	Sets the IP address for a selected bridge group.
<code>bridge-group loop-protection</code>	Enables or disables loop protection for a selected bridge group.
<code>bridge-group multicast</code>	Enables or disables multicast forwarding for a selected bridge group.
<code>bridge-group name</code>	Sets the name for a selected bridge group.
<code>bridge-group redundancy-group</code>	Assigns or unassigns a selected bridge group to a redundancy group.
<code>bridge-group subnet-prefix</code>	Configures or removes an IPv4 subnet for bridging by a bridge group.
<code>card</code>	Enter card configuration submode.
<code>clock summer-time</code>	Sets daylight savings time on your server switch.
<code>clock timezone</code>	Sets the time zone of the server switch.
<code>cdp holdtime</code>	Sets the Cisco Discovery Protocol (CDP) transmission holdtime.
<code>cdp run</code>	Enables the Cisco Discovery Protocol (CDP).
<code>cdp timer</code>	Specifies how often Cisco Discovery Protocol (CDP) updates are sent.
<code>diagnostic</code>	Enters diagnostic configuration submode.
<code>exit</code>	Exits global configuration mode.
<code>fc srp initiator</code>	Configures an initiator—normally a SAN-attached host but in IB terms a SRP host combined with a server switch—to communicate with a Fibre Channel SAN across a Fibre Channel gateway on your server switch. Also, affects I-WWPN relationship with VSANs.
<code>fc srp initiator-wwpn</code>	Manually creates, on a physical Fibre Channel gateway port, a virtual port that points to an initiator.
<code>fc srp it</code>	Configures an initiator-target (IT) pair.
<code>fc srp itl</code>	Configures an initiator-target-LUN (ITL) group.
<code>fc srp lu</code>	Configure a logical unit.
<code>fc srp target</code>	Configures targets.
<code>fc srp-global gateway-portmask-policy restricted</code>	Denies new initiators port access to FC gateway ports.
<code>fc srp-global itl</code>	Configures the default attributes that your server switch assigns to all new ITLs.

**Table 2-3 Global Configuration Mode Commands (continued)**

<b>Command Name</b>	<b>Function</b>
<code>fc srp-global lun-policy restricted</code>	Enables or disables LUN masking on all new ITs and ITLs.
<code>ftp-server enable</code>	Enables or disables the FTP server on your server switch.
<code>help</code>	Views the help options that the CLI provides in this mode.
<code>history</code>	Displays a list of the commands that you executed during your CLI session.
<code>hostname</code>	Assigns a hostname to your server switch.
<code>ib pm</code>	Configures performance monitoring of the server switch.
<code>ib sm</code>	Administers the Subnet Manager (SM) on your server switch for everything except multicast, and creates and populates partitions.
<code>ib sm db-sync</code>	Configures the database synchronize feature between the master Subnet Manager and one or more standby (slave) Subnet Managers.
<code>ib sm multicast ipoib</code>	Configures IPoIB multicast groups.
<code>ib sm multicast mgid</code>	Configures non-IPoIB multicast groups.
<code>ib sm sl-vl-mapping</code>	Use this command to map service levels (SLs) to virtual lanes (VLs).
<code>ib sm span</code>	Enables the mirroring of traffic from an ingress port to a destination port at a specified node
<code>ib sm vl-arbitration</code>	Place entries into the VL arbitration table.
<code>ib-agent</code>	Configures subnet management agent (SMA) node strings.
<code>interface</code>	Enters an interface configuration submode.
<code>ip domain-name</code>	Assigns a DNS name to your server switch.
<code>ip http</code>	Enables or configures HTTP and HTTPS services on your server switch.
<code>ip name-server-one</code>	Specifies a primary domain name server (DNS).
<code>ip name-server-two</code>	Specifies a secondary domain name server (DNS).
<code>ip route</code>	Defines static routes to remote hosts or networks for forwarding IP packets.
<code>location</code>	Assigns a text-based location identifier to your server switch.
<code>logging</code>	Identifies a remote server as a server that accepts log messages from your server switch.
<code>ntp</code>	Synchronizes the clock on your server switch to primary, secondary, and tertiary NTP servers.
<code>power-supply</code>	Enters power supply configuration submode.
<code>radius-server</code>	Configures up to three RADIUS servers that your server switch uses to authenticate CLI user logins.
<code>redundancy-group</code>	Creates or removes a redundancy group.
<code>redundancy-group broadcast-forwarding</code>	Enables broadcast forwarding for all members of a redundancy group.

**Table 2-3** Global Configuration Mode Commands (continued)

Command Name	Function
redundancy-group directed-broadcast	Enables directed broadcast for a redundancy group.
redundancy-group gratuitous-igmp	Enables gratuitous IGMP for all members of all bridge groups in a specified redundancy group.
redundancy-group igmp	Sets the IGMP version for each bridge group in a redundancy group.
redundancy-group load-balancing	Enables load balancing among members of a redundancy group.
redundancy-group multicast	Enables multicast forwarding for a selected redundancy group.
redundancy-group name	Configures a name for a redundancy group.
redundancy-group new-member-force-reelection	Configures a redundancy group to force reelection when a new member joins, or when an existing member comes online.
snmp-server	Stores contact and location information and configures the SNMP notification host and SNMPv3 user.
system-mode	Configures your server switch to deny changes to SRP configuration to preserve VFrame-authorized configurations.
system ib-counter-reset	Disables or reenables the regular resetting of IB port counters on your server switch.
tacacs-server	Configures a TACACS+ server.
telnet	Enables or disables Telnet services on your server switch.
trace	Tracks internal server switch program modules that specific interface cards call.
username	Reconfigures or creates and configures user accounts.
vSAN database	Creates and configures a Fiber Channel-based Virtual Storage Area Network.

## Ethernet Interface Configuration Submode Commands

The following commands are available in Ethernet interface configuration submode.

**Table 2-4** Ethernet Interface Configuration Submode Commands

Command	Function
auto-negotiate (Ethernet interface configuration submode)	Dynamically determines the connection speed of direct-attached Ethernet devices.
bridge-group (Ethernet interface configuration submode)	Assigns a bridge-group to the Ethernet interface.
exit	Exits interface Ethernet submode.
half-duplex	Configures an Ethernet connection in half duplex mode.

**Table 2-4      Ethernet Interface Configuration Submode Commands (continued)**

<b>Command</b>	<b>Function</b>
<a href="#">help</a>	Views the help options that the CLI provides for this submode.
<a href="#">history</a>	Displays a list of the commands that you executed during your CLI session.
<a href="#">ip address (Ethernet interface configuration submode)</a>	Assigns an IP address and subnet mask to an Ethernet port.
<a href="#">ip backup-address</a>	Assigns a backup address to an Ethernet port.
<a href="#">link-trap</a>	Configures Ethernet ports to generate link-up and link-down SNMP traps when the operating status (oper-status) of the ports changes.
<a href="#">name</a>	Assigns a user-defined name to an interface Ethernet port.
<a href="#">shutdown</a>	Disables or enables an Ethernet port.
<a href="#">speed (Ethernet interface configuration submode)</a>	Assigns an Ethernet connection speed to a port or ports.
<a href="#">trunk-group</a>	Assigns a trunk group to one or more Ethernet interfaces.

## InfiniBand Interface Configuration Submode Commands

Table 2-5 lists the commands available in InfiniBand interface configuration submode.

**Table 2-5      InfiniBand Interface Configuration Submode Commands**

<b>Command</b>	<b>Function</b>
<a href="#">auto-negotiate (InfiniBand interface configuration submode)</a>	Dynamically determines the connection speed of direct-attached InfiniBand devices.
<a href="#">exit</a>	Exits interface IB submode.
<a href="#">help</a>	Views the help options that the CLI provides for this submode.
<a href="#">history</a>	Displays a list of the commands that you executed during your CLI session.
<a href="#">link-trap</a>	Configures IB ports to generate link-up and link-down SNMP traps when the operating status (oper-status) of the ports changes.
<a href="#">name</a>	Assigns a user-defined name to an IB port.
<a href="#">shutdown</a>	Disables or enables an IB port.
<a href="#">speed (InfiniBand interface configuration submode)</a>	Configures the link capacity (or port speed) of an InfiniBand connection.

## Fibre Channel Interface Configuration Submode Commands

[Table 2-6](#) lists the commands that are available in Fibre Channel interface configuration submode.

**Table 2-6 Fibre Channel Interface Configuration Submode Commands**

Command	Function
auto-negotiate (Fibre Channel interface configuration submode)	Dynamically determines the connection speed of direct-attached Fibre Channel devices.
exit	Exits interface FC submode.
help	Views the help options that the CLI provides for this submode.
history	Displays a list of the commands that you executed during your CLI session.
link-trap	Configures Fibre Channel ports to generate link-up and link-down SNMP traps when the operating status (oper-status) of the ports changes.
switchport trunk	Assigns E_Ports to VSANs.
switchport trunk mode	Sets the state of trunking for a Fiber Channel E_PORT. Switchport trunks can be added to VSANs.
name	Assigns a user-defined name to a Fibre Channel port.
shutdown	Disables or enables a Fibre Channel port.
speed (Fibre Channel interface configuration submode)	Configures the connection speed between Fibre Channel interface ports on your server switch and Fibre Channel devices.

## Trunk Interface Configuration Submode Commands

[Table 2-7](#) lists the commands that are available in trunk interface configuration submode.

**Table 2-7 Trunk Interface Configuration Submode Commands**

Command	Function
bridge-group (trunk interface configuration submode)	Assigns a trunk group to a bridge group and optionally configures the trunk group with an IEEE 802.1Q VLAN tag.
disable (trunk interface configuration submode)	Disables a trunk group.
distribution-type	Configures the type of load distribution that your Ethernet gateway uses to communicate with a Link Aggregation-aware switch.
enable (trunk interface configuration submode)	Enables a trunk group.
exit	Exits interface trunk configuration submode.
help	Views the help options that the CLI provides for this submode.

**Table 2-7 Trunk Interface Configuration Submode Commands (continued)**

<b>Command</b>	<b>Function</b>
<a href="#">history</a>	Displays a list of the commands that you executed during your CLI session.
<a href="#">name</a>	Assigns a user-defined name to an interface port.

## Gateway Interface Configuration Mode Commands

Table 2-8 lists the commands that are available in gateway interface configuration mode.

**Table 2-8 Gateway Interface Configuration Mode Commands**

<b>Command</b>	<b>Function</b>
<a href="#">bridge-group (gateway interface configuration submode)</a>	Assigns a bridge group to a gateway interface and optionally configures 16-bit partition key
<a href="#">exit</a>	Exits interface gateway configuration submode.
<a href="#">help</a>	Views the help options that the CLI provides for this submode.
<a href="#">history</a>	Displays a list of the commands that you executed during your CLI session.
<a href="#">ip address (gateway interface configuration submode)</a>	Assigns an IP address to a gateway.

## Ethernet Management Configuration Submode Commands

Table 2-9 lists the commands that are available in Ethernet management configuration submode.

**Table 2-9 Ethernet Management Interface Configuration Submode Commands**

<b>Command</b>	<b>Function</b>
<a href="#">addr-option</a>	Configures the Ethernet Management port to use a static IP address, obtains an IP address from a DHCP server, or automatically obtains an IP address from a hardware-designated controller.
<a href="#">exit</a>	Exits Ethernet management interface configuration submode.
<a href="#">gateway</a>	Assigns a default IP gateway to the Ethernet Management port.
<a href="#">help</a>	Views the help options that the CLI provides for this submode.
<a href="#">history</a>	Displays a list of the commands that you executed during your CLI session.
<a href="#">ip address (Ethernet management interface configuration submode)</a>	Assigns an IP address to the Ethernet Management Interface port.
<a href="#">shutdown</a>	Disables the management interface. Use the <b>no</b> form of this command to enable the interface.

## InfiniBand Management Interface Configuration Submode Commands

[Table 2-10](#) lists the commands that are available in InfiniBand management interface configuration submode.

**Table 2-10 InfiniBand Management Interface Configuration Submode Commands**

Command	Function
<a href="#">addr-option</a>	Configures the management IB port address option.
<a href="#">exit</a>	Exits InfiniBand management interface configuration submode.
<a href="#">gateway</a>	Assigns a default IP gateway to the virtual in-band InfiniBand port.
<a href="#">help</a>	Views the help options that the CLI provides for this submode.
<a href="#">history</a>	Displays a list of the commands that you executed during your CLI session.
<a href="#">ip address (InfiniBand management interface configuration submode)</a>	Assigns an IP address to the InfiniBand Management Interface port.
<a href="#">mtu</a>	Configures the maximum transmission unit on the chassis
<a href="#">pkey</a>	Changes the in band IPoIB management partition.
<a href="#">shutdown</a>	Disables the management interface. Use the <b>no</b> form of this command to enable the interface.

## Card Configuration Mode Commands

[Table 2-11](#) lists the commands that are available in card configuration submode.

**Table 2-11 Card Configuration Submode Commands**

Command	Function
<a href="#">action</a>	Executes predefined administrative functions on expansion modules or gateway cards.
<a href="#">exit</a>	Exits card configuration submode.
<a href="#">help</a>	Views the help options that the CLI provides for this submode.
<a href="#">history</a>	Displays a list of the commands that you executed during your CLI session.
<a href="#">shutdown</a>	Disables or enables a card.
<a href="#">type</a>	Assigns an administrative card-type to a slot into which you want to install a card.

## Commands for Diagnostic Submodes

[Table 2-12](#) lists diagnostic commands along with the command modes and submode that support them.

**Table 2-12 Diagnostic Commands**

Command	Mode	Function
<a href="#">data-pattern</a>	Interface diagnostic configuration submode	Specifies a data pattern when you run a diagnostic test on an interface.
<a href="#">data-size</a>	Interface diagnostic configuration submode	Configures the data size property of your test to customize the size of packets, frames, or IB packets that your server switch uses for your test.
<a href="#">diagnostic</a>	Global configuration mode	Enters diagnostic configuration submode.
<a href="#">iterations</a>	Interface diagnostic configuration submode	Specifies the number of times to run a diagnostic test on an interface.
<a href="#">source-wwpn</a>	Fibre Channel interface diagnostic configuration submode	Configures an optional WWPN identifier for a Fibre Channel interface Echo test.
<a href="#">start</a>	All diagnostic configuration submodes	Begins a diagnostic test.
<a href="#">stop</a>	All diagnostic configuration submodes	Ends a diagnostic test.
<a href="#">target-wwpn</a>	Fibre Channel interface diagnostic configuration submode	Configures an optional WWPN identifier for a Fibre Channel interface Echo test.
<a href="#">test</a>	All diagnostic configuration submodes	Specifies a diagnostic test to run with the test command.
<a href="#">validate</a>	Diagnostic configuration submode	Validates diagnostic tests.

## show Commands

[Table 2-13](#) lists the show commands. These commands are all available in user EXEC mode and in privileged EXEC mode.

**Table 2-13 Show Commands**

Command	Function
<a href="#">show aaa accounting</a>	Displays the location and method by which accounting is performed on a user session. Displays accounting logs found in the local switch.
<a href="#">show aaa authorization</a>	Displays whether authorization is local or on a tacacs server, and the default user privileges.
<a href="#">show authentication</a>	Displays how your system authenticates logins.
<a href="#">show backplane</a>	Displays a breakdown of Serial Electrically Erasable and Programmable Read-Only Memory (SEEPROM) details of your server switch.

**Table 2-13 Show Commands (continued)**

<b>Command</b>	<b>Function</b>
<code>show boot-config</code>	Displays the active system image that runs when your server switch boots.
<code>show bridge-forwarding</code>	Displays subnets to which bridge groups forward traffic.
<code>show bridge-group</code>	Displays the attributes of bridge groups.
<code>show bridge-subnets</code>	Displays the subnets that a particular bridge group bridges.
<code>show card</code>	Displays the configuration, status, and Serial Electrically Erasable and Programmable Read Only Memory (SEEPROM) details about all cards.
<code>show card-inventory</code>	Displays the system resources and image data of all cards.
<code>show cdp</code>	Displays the Cisco Discovery Protocol (CDP) advertisement information.
<code>show cdp entry</code>	Displays the Cisco Discovery Protocol (CDP) information for a specific neighbor.
<code>show cdp neighbors</code>	Displays the information for neighbors CDP has discovered.
<code>show clock</code>	Displays the current system time.
<code>show config</code>	Displays the startup configuration.
<code>show diagnostic</code>	Displays diagnostics.
<code>show diagnostic card</code>	Displays completed or ongoing diagnostic tests for cards.
<code>show diagnostic chassis</code>	Displays completed or ongoing diagnostic tests the chassis.
<code>show diagnostic fan</code>	Displays completed or ongoing diagnostic tests for fans.
<code>show diagnostic fru-error</code>	Displays field-replaceable unit (FRU) run-time errors.
<code>show diagnostic interface ethernet</code>	Displays completed or ongoing diagnostic tests for Ethernet gateway ports.
<code>show diagnostic interface fc</code>	Displays completed or ongoing diagnostic tests for Fibre Channel gateway ports.
<code>show diagnostic interface ib</code>	Displays completed or ongoing diagnostic tests for InfiniBand switch ports
<code>show diagnostic post</code>	Displays POST error messages.
<code>show diagnostic power-supply</code>	Displays completed or ongoing diagnostic tests for power supplies.
<code>show fan</code>	Displays the status of the fans in your server switch.
<code>show fc srp initiator</code>	Displays the attributes of initiators that you have configured on your server switch.
<code>show fc srp initiator-wwpn-view</code>	Displays SRP targets that an initiator can access through one of its virtual ports.
<code>show fc srp it</code>	Displays initiator-target pairs that you have configured or that your server switch has discovered.
<code>show fc srp itl</code>	Displays all ITLs that run through your server switch.
<code>show fc srp itl-statistics</code>	Displays the SRP/Fibre Channel statistics for every ITL.
<code>show fc srp lu</code>	Displays attributes of logical units.
<code>show fc srp statistics</code>	Displays aggregate SRP I/O statistics for all ITLs on your server switch.

**Table 2-13 Show Commands (continued)**

<b>Command</b>	<b>Function</b>
<code>show fc srp target</code>	Displays the properties of targets.
<code>show fc srp-global</code>	Display the permissions that apply to all new ITs and ITLs.
<code>show host</code>	Display the DNS name servers and domain name that your server switch uses.
<code>show ib dm ioc</code>	Displays the Device Manager input/output controller (IOC) configuration.
<code>show ib dm iou</code>	Displays the Device Manager input/output unit (IOU) configuration.
<code>show ib pm config</code>	Displays the performance monitoring configuration on an InfiniBand subnet.
<code>show ib pm connection counter</code>	Displays the performance monitoring counters on all ports on a connection.
<code>show ib pm connection monitor</code>	Displays the state of a performance monitored connection.
<code>show ib pm port counter config</code>	Displays whether PM access to port counters is enabled or disabled.
<code>show ib pm port counter</code>	Displays the performance monitoring counters for one or more InfiniBand ports.
<code>show ib pm port monitor</code>	Displays the performance monitoring user-configured monitored ports, or the cumulative port counters, or the cumulative port counters for ports that have exceeded thresholds.
<code>show ib pm threshold</code>	Displays performance monitoring thresholds
<code>show ib sm configuration</code>	Displays information about the Subnet Managers on your InfiniBand fabric.
<code>show ib sm db-sync</code>	Displays whether the database of the master Subnet Manager synchronizes with one or more standby databases, or displays the frequency with which the databases synchronize.
<code>show ib sm lft</code>	Displays linear forwarding information based on the block number, and linear entries that are in use by the Subnet Manager.
<code>show ib sm mft</code>	Displays multicast forwarding information based on the block number, and multicast entries that are in use by a Subnet Manager.
<code>show ib sm multicast</code>	Verifies whether the multicast group includes the host.
<code>show ib sm neighbor</code>	Displays the InfiniBand devices that directly connect to your server switch.
<code>show ib sm node</code>	Displays the configuration of all nodes on a subnet or displays the configuration of an individual node.
<code>show ib sm partition</code>	Displays the partitions that the Subnet Manager on your server switch manages.
<code>show ib sm port</code>	Displays all InfiniBand ports on the fabric, the nodes to which the ports belong, the capabilities of the ports, and the link statistics of the ports.
<code>show ib sm route-around</code>	Displays chassis, nodes, and ports that have been specifically excluded from routing calculations.
<code>show ib sm span</code>	Displays the spans configured in the subnet along with their status.
<code>show ib sm service</code>	Displays services available on your subnet.

**Table 2-13 Show Commands (continued)**

<b>Command</b>	<b>Function</b>
<a href="#">show ib sm sl-vl-mapping</a>	Displays the contents of the SL to VL mapping tables programmed in the fabric.
<a href="#">show ib sm sl-vl-mapping-config</a>	Displays the user provisioned SL to VL mapping profiles in the subnet manager.
<a href="#">show ib sm sm-info</a>	Displays Subnet Manager information maintained by the Subnet Manager on this device.
<a href="#">show ib sm subscription</a>	Displays event subscriptions or information records managed by your Subnet Manager on a specified device.
<a href="#">show ib sm switch</a>	Displays the attributes of all InfiniBand switches in your fabric (for debug purposes).
<a href="#">show ib sm switch-elem-route</a>	Displays all the external ports of all the server switches through which traffic enters and exits as it travels from the source LID to the destination LID.
<a href="#">show ib sm switch-route</a>	Displays all the ports, both internal and external, of all the server switches through which traffic travels from a source LID to a destination LID.
<a href="#">show ib sm vl-arbitration</a>	Displays the contents of the VL arbitration tables programmed in the fabric.
<a href="#">show ib sm vl-arbitration-config</a>	Displays the user provisioned VL arbitration profiles in the subnet manager.
<a href="#">show ib-agent channel-adapter</a>	Displays the attributes of InfiniBand agents for channel adapters (gateways and controllers) on your server switch.
<a href="#">show ib-agent summary</a>	Displays the attributes of all InfiniBand agents on your server switch.
<a href="#">show ib-agent switch</a>	Displays the attributes of InfiniBand agents for switches on your server switch.
<a href="#">show interface ethernet</a>	Displays the attributes of Ethernet ports.
<a href="#">show interface fc</a>	Displays the attributes of Fibre Channel ports.
<a href="#">show interface gateway</a>	Displays attributes of the internal InfiniBand gateway ports of Fibre Channel and Ethernet expansion modules.
<a href="#">show interface ib</a>	Displays attributes of InfiniBand ports.
<a href="#">show interface mgmt-ethernet</a>	Displays the configuration of the Ethernet Management port on the controller card of your server switch.
<a href="#">show interface mgmt-ib</a>	Displays the status and address information for the virtual InfiniBand Management port.
<a href="#">show interface mgmt-serial</a>	Displays the configuration of the Serial Console port on the controller card of your server switch.
<a href="#">show inventory</a>	Displays the inventory of your server switch and to see a description of the chassis and slots.
<a href="#">show ip</a>	Displays IP configuration data.
<a href="#">show ip http</a>	Displays the configuration of the HTTP server on your server switch.
<a href="#">show ip http server secure</a>	Displays the HTTPS configuration on your server switch.
<a href="#">show location</a>	Displays the location data on your server switch.

**Table 2-13 Show Commands (continued)**

<b>Command</b>	<b>Function</b>
<code>show logging</code>	Displays the active system log file.
<code>show ntp</code>	Displays the current date and time of your server switch and the Network Time Protocol (NTP) servers that your server switch uses to set the system clock.
<code>show power-supply</code>	Displays the status of the power supplies on your server switch.
<code>show redundancy-group</code>	Displays redundancy group information.
<code>show running-status</code>	Executes a thorough range of show commands for a particular technology.
<code>show sensor</code>	Displays the temperature at several key locations in your server switch.
<code>show snmp</code>	Displays the SNMP receivers for link traps on your server switch.
<code>show system</code>	Displays the system global settings.
<code>show system-mode</code>	Displays the system mode (normal or VFrame).
<code>show system-services</code>	Displays system services such as FTP and Telnet.
<code>show terminal</code>	Displays terminal parameters.
<code>show trace</code>	Displays the system program modules that your server switch calls.
<code>show trunk</code>	Displays the configuration of trunk groups.
<code>show user</code>	Displays user information for yourself or one or more users on the server switch.
<code>show version</code>	Displays the software version, contact information, system up-time, time of last configuration change, and the last action performed on the server switch.
<code>show vsan</code>	Displays information on currently configured VSANs.

## Cisco SFS 3000-Series Only Commands

Table 2-14 lists commands that apply to Ethernet gateways or Fibre Channel gateways and are available only on Cisco SFS 3001, Cisco SFS 3012, and Cisco SFS 3012R server switches. Users of Cisco SFS 7000, Cisco SFS 7000P, Cisco SFS 7008, Cisco SFS 7008P, Cisco SFS 7000D, or Cisco 4x InfiniBand Switch Module for IBM Blade Server should ignore these commands.

**Table 2-14 Commands Available only on SFS-3000-Series Server Switches**

<b>Command</b>	<b>Function</b>
<code>bridge-group (global configuration mode)</code>	Creates and configures bridge groups.
<code>bridge-group broadcast-forwarding</code>	Enables or disables broadcast forwarding for a selected bridge group.
<code>bridge-group directed-broadcast</code>	Enables directed broadcast for a bridge group.
<code>bridge-group eth-next-hop</code>	Creates or removes an IPv4 Ethernet route for a bridge group.
<code>bridge-group gratuitous-igmp</code>	Enables or disables gratuitous IGMP for a selected bridge group.

**Table 2-14** Commands Available only on SFS-3000-Series Server Switches (continued)

Command	Function
<code>bridge-group ib-next-hop</code>	Creates or removes an IPv4 InfiniBand route for a bridge group.
<code>bridge-group igmp</code>	Sets the IGMP version for the selected bridge group.
<code>bridge-group ip-addr</code>	Sets the IP address for a selected bridge group.
<code>bridge-group loop-protection</code>	Enables or disables loop protection for a selected bridge group.
<code>bridge-group multicast</code>	Enables or disables multicast forwarding for a selected bridge group.
<code>bridge-group name</code>	Sets the name for a selected bridge group.
<code>bridge-group redundancy-group</code>	Assigns or unassigns a selected bridge group to a redundancy group.
<code>bridge-group subnet-prefix</code>	Configures or removes an IPv4 subnet for bridging by a bridge group.
<code>disable (trunk interface configuration submode)</code>	Disables a trunk group.
<code>distribution-type</code>	Configures the type of load distribution that your Ethernet gateway uses to communicate with a Link Aggregation-aware switch.
<code>enable (trunk interface configuration submode)</code>	Enables a trunk group.
<code>fc srp initiator</code>	Configures an initiator—normally a SAN-attached host but in IB terms a SRP host combined with a server switch—to communicate with a Fibre Channel SAN across a Fibre Channel gateway on your server switch.
<code>fc srp initiator-wwpn</code>	Manually creates, on a physical Fibre Channel gateway port, a virtual port that points to an initiator.
<code>fc srp it</code>	Configures an initiator-target (IT) pair.
<code>fc srp itl</code>	Configures an initiator-target-LUN (ITL) group.
<code>fc srp lu</code>	Configure a logical unit.
<code>fc srp target</code>	Configures targets.
<code>fc srp-global gateway-portmask-policy restricted</code>	Denies new initiators port access to FC gateway ports.
<code>fc srp-global itl</code>	Configures the default attributes that your server switch assigns to all new ITLs.
<code>fc srp-global lun-policy restricted</code>	Enables or disables LUN masking on all new ITs and ITLs.
<code>half-duplex</code>	Configures an Ethernet connection in half duplex mode.
<code>ip address (Ethernet interface configuration submode)</code>	Assigns an IP address and subnet mask to an Ethernet port.
<code>ip address (gateway interface configuration submode)</code>	Assigns an IP address to a gateway.

**Table 2-14 Commands Available only on SFS-3000-Series Server Switches (continued)**

<b>Command</b>	<b>Function</b>
<code>redundancy-group</code>	Creates or removes a redundancy group.
<code>redundancy-group broadcast-forwarding</code>	Enables broadcast forwarding for all members of a redundancy group.
<code>redundancy-group directed-broadcast</code>	Enables directed broadcast for a redundancy group.
<code>redundancy-group gratuitous-igmp</code>	Enables gratuitous IGMP for all members of all bridge groups in a specified redundancy group.
<code>redundancy-group igmp</code>	Sets the IGMP version for each bridge group in a redundancy group.
<code>redundancy-group load-balancing</code>	Enables load balancing among members of a redundancy group.
<code>redundancy-group multicast</code>	Enables multicast forwarding for a selected redundancy group.
<code>redundancy-group name</code>	Configures a name for a redundancy group.
<code>redundancy-group new-member-force-relection</code>	Configures a redundancy group to force re-election when a new member joins or an existing member comes online.
<code>system-mode</code>	Configures your server switch to deny changes to SRP configuration to preserve VFrame-authorized configurations
<code>trunk-group</code>	Assigns a trunk group to one or more Ethernet interfaces.

