



T Commands

The commands in this chapter apply to the Cisco MDS 9000 Family of multilayer directors and fabric switches. All commands are shown here in alphabetical order regardless of command mode. See the “Command Modes” section to determine the appropriate mode for each command. For more information, refer to the *Cisco MDS 9000 Family Configuration Guide*.

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tail

To display the last lines (tail end) of a specified file, use the **tail** command in EXEC mode.

```
tail filename [number-of-lines]
```

Syntax Description	<i>filename</i>	The name of the file for which you want to view the last lines.
	<i>number-of-lines</i>	(Optional) The number of lines you want to view. If you do not specify the number of lines, the last 10 lines are displayed.

Defaults None.

Command Modes EXEC mode.

Command History This command was introduced in Cisco MDS SAN-OS Release 1.0(2).

Usage Guidelines You need two separate CLI terminals to use this command. In one terminal, execute the run-script or any other desired command. In the other, issue the **tail** command for the mylog file. In the second terminal, you will see the last lines of the mylog file (as it grows) that is being saved in response to the command issued in the first terminal.

If you specify a long file and would like to exit in the middle, enter **Ctrl-c** to exit this command.

Examples The following example displays the last lines (tail end) of a specified file.

```
switch# run-script slot0:test mylog
```

In another terminal, issue the **tail** command for the mylog file.

```
switch# tail mylog  
config t
```

In the second CLI terminal, you see the last lines of the mylog file (as it grows) that is being saved in response to the command issued in the first terminal.

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tcp-connection

To configure the number of TCP connections for the FCIP interface, use the **tcp-connection** option. To revert to the default of two attempts, use the **no** form of the option.

tcp-connection *number*

no tcp-connection *number*

Syntax	Description
tcp-connection	Configures the number of TCP connection attempts.
<i>number</i>	Enters the number of attempts (1 or 2).

Defaults None.

Command Modes Configuration mode

Command History This command was introduced in Cisco MDS SAN-OS Release 1.1(1).

Usage Guidelines Access this command from the `switch(config-if)#` submenu.
Use the **tcp-connection** option to specify the number of TCP connections from a FCIP link. By default, the switch tries two (2) TCP connections for each FCIP link.

Examples

```
switch# config t
switch(config)# interface fcip 50
switch(config-if)# tcp-connection 1
switch(config-if)# no tcp-connection 1
```

Related Commandss	Command	Description
	show interface fcip	Displays an interface configuration for a specified FCIP interface.

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tcp cwm

To configure congestion window monitoring (cwm) TCP parameters in a Cisco MDS 9000 Family switch, use the **tcp cwm** command. Use the **no** form of this command to disable this feature or revert to its factory defaults.

tcp cwm (*burstsize burstsize*)

no tcp cwm (*burstsize burstsize*)

Syntax Description

tcp	Configures TCP parameters for the FCIP profile.
cwm	Enables congestion monitoring.
burstsize	Configures TCP burstsize.
<i>burstsize</i>	Specifies the burstsize ranging from 10 to 100 KB.

Defaults

Enabled

Command Modes

Configuration mode—fcip profile submode

Command History

This command was introduced in Cisco MDS SAN-OS Release 1.1(1).

Usage Guidelines

Use these TCP parameters to control TCP retransmission behavior in a switch.

Examples

The following example configures a FCIP profile and enables congestion monitoring.

```
switch## config t
switch(config)# fcip profile 5
switch(config-profile)# tcp cwm
```

The following example assigns the burstsize value at 20 KB:

```
switch(config-profile)# tcp cwm burstsize 20
```

The following example disables congestion monitoring.

```
switch(config-profile)# no tcp cwm
```

The following example leaves the CWM feature in an enabled state but changes the burstsize to the default of 10 KB.

```
switch(config-profile)# no tcp cwm burstsize 25
```

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telnet

To log in to a host that supports Telnet, use the **telnet** command in EXEC mode.

telnet [hostname | ip-address]

Syntax Description	hostname	(Optional) Host name. Maximum length is 64 characters.
	ip-address	(Optional) IP address Maximum length is 64 characters.

Defaults None.

Command Modes EXEC mode.

Command History This command was introduced in Cisco MDS SAN-OS Release 1.0(2).

Usage Guidelines None.

Examples The following example establishes a Telnet session to the specified IP address.

```
switch# telnet 172.22.91.153
Trying 172.22.91.153...
Connected to 172.22.91.153.
Login:xxxxxxxx
Password:xxxxxxxx
switch#
```

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telnet server enable

To enable the Telnet server if you wish to return to a Telnet connection from a secure SSH connection, use the **telnet server enable** command. To disable the Telnet server, use the **no** form of this command

telnet server enable

no telnet server enable

Syntax Description This command has no arguments or keywords.

Defaults Enabled.

Command Modes Configuration mode.

Command History This command was introduced in Cisco MDS SAN-OS Release 1.0(2).

Usage Guidelines None.

Examples The following example enables the Telnet server.

```
switch(config)# telnet server enable
updated
```

```
switch(config)# no telnet server enable
updated
```

Related Commands	Command	Description
	telnet	Logs in to a host that supports Telnet.

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terminal

To configure terminal attributes, use the **terminal** command in EXEC mode. To stop the display of syslog output, use the **no** form of the command.

terminal [**length** *number-of-lines* | **monitor** | **terminal-type** | **unlock** | **width** *integer*]

Syntax Description	
length	(Optional) Sets the number of lines on the screen.
<i>number-of-lines</i>	(Optional) Specifies the number of lines on the screen from 0 to 512. Enter 0 to scroll continuously.
monitor	(Optional) Displays syslog output for the current terminal and session.
terminal-type	(Optional) Sets the terminal type.
width	(Optional) Sets the width of the display terminal, from 0 to 80.
<i>integer</i>	Sets the width of the display terminal, from 0 to 80.

Defaults

The default number of lines for the length is 24. The default width is 80 lines.

Command Modes

EXEC

Command History

This command was introduced in Cisco MDS SAN-OS Release 1.0(2).

Usage Guidelines

Remember that all terminal parameter-setting commands are set locally and do not remain in effect after a session is ended. You must perform this task at the EXEC prompt at each session to see the debugging messages.

If the length is not 24 and the width is not 80, then you need to set a length and width.

Examples

The following example displays debug command output and error messages during the current terminal session.

```
switch# terminal monitor
Aug 8 10:32:42 sup48 % LOG_PLATFORM-5-PLATFORM_MOD_CFG_PWRDN: Module 1 powered down
Aug 8 10:32:42 sup48 % LOG_PLATFORM-5-PLATFORM_MOD_PWRDN: Module 1 powered down
Aug 8 10:32:42 sup48 % LOG_PLATFORM-5-PLATFORM_MOD_INSERT: Module 1 has been inserted
Aug 8 10:33:12 sup48 % LOG_PLATFORM-5-PLATFORM_MOD_PWRON: Module 1 powered up
Aug 8 10:33:13 sup48 % LOG_MODULE-5-MOD_REG_OK: LCM - Registration succeeded for module 1
Aug 8 10:38:15 sup48 % LOG_PLATFORM-5-PLATFORM_MOD_CFG_PWRDN: Module 1 powered down
Aug 8 10:38:15 sup48 % LOG_PLATFORM-5-PLATFORM_MOD_INSERT: Module 1 has been inserted
Aug 8 10:38:45 sup48 % LOG_MODULE-5-MOD_REG_OK: LCM - Registration succeeded for module 1
Aug 8 10:43:10 sup48 % LOG_PLATFORM-5-PLATFORM_MOD_CFG_PWRDN: Module 1 powered down
Aug 8 10:43:10 sup48 % LOG_PLATFORM-5-PLATFORM_MOD_PWRDN: Module 1 powered down
.....
```

The following example stops the current terminal monitoring session.

```
switch# terminal no monitor
```

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time-stamp

To enable FCIP time stamps on a frame, use the **time-stamp** option. To disable this option for the selected interface, use the **no** form of the option.

time-stamp | **acceptable-diff** *number*

no time-stamp | **acceptable-diff** *number*

Syntax Description	Command	Description
	time-stamp	Configures time-stamp.
	acceptable-diff	Configures the acceptable time difference for time-stamps.
	<i>number</i>	Enters the acceptable time from 1 to 60000.

Defaults Disabled.

Command Modes Configuration mode

Command History This command was introduced in Cisco MDS SAN-OS Release 1.1(1).

Usage Guidelines Access this command from the `switch(config-if)#` submode.
The **time-stamp** option instructs the switch to discard frames that are older than a specified time.

Examples

```
switch# config t
switch(config)# interface fcip 50
switch(config-if)# time-stamp
switch(config-if)# time-stamp acceptable-diff 4000
```

Related Commandss	Command	Description
	show interface fcip	Displays an interface configuration for a specified FCIP interface.

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traceroute

To print the route an IP packet takes to a network host, use the **traceroute** command in EXEC mode.

```
traceroute {hostname | ip-address}
```

Syntax Description		
	<i>host name</i>	The host name.
	<i>ip-address</i>	The IP address.

Defaults None.

Command Modes EXEC mode.

Command History This command was introduced in Cisco MDS SAN-OS Release 1.0(2).

Usage Guidelines This command traces the route an IP packet follows to an internet host by launching UDP probe packets with a small TTL (time to live) then listening for an ICMP (Internet Control Message Protocol) “time exceeded” reply from a gateway.



Note

Probes start with a TTL of one and increase by one until encountering an ICMP “port unreachable.” This means that the host was accessed or a maximum flag was hit. A line is printed showing the TTL, address of the gateway and round trip time of each probe. If the probe answers come from different gateways, the address of each responding system is printed.

Examples The following example prints the route IP packets take to the network host www.cisco.com.

```
switch# traceroute www.cisco.com
traceroute to www.cisco.com (171.71.181.19), 30 hops max, 38 byte packets
 1 kingfisher1-92.cisco.com (172.22.92.2) 0.598 ms 0.470 ms 0.484 ms
 2 nubulab-gw1-bldg6.cisco.com (171.71.20.130) 0.698 ms 0.452 ms 0.481 ms
 3 172.24.109.185 (172.24.109.185) 0.478 ms 0.459 ms 0.484 ms
 4 sjc12-lab4-gw2.cisco.com (172.24.111.213) 0.529 ms 0.577 ms 0.480 ms
 5 sjc5-sbb4-gw1.cisco.com (171.71.241.174) 0.521 ms 0.495 ms 0.604 ms
 6 sjc12-dc2-gw2.cisco.com (171.71.241.230) 0.521 ms 0.614 ms 0.479 ms
 7 sjc12-dc2-cec-css1.cisco.com (171.71.181.5) 2.612 ms 2.093 ms 2.118 ms
 8 www.cisco.com (171.71.181.19) 2.496 ms * 2.135 ms
```

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trunk protocol enable

To configure the trunk protocol, use the **trunk protocol enable** command in configuration mode. To disable the trunk protocol, use the **no** form of the command.

trunk protocol enable

no trunk protocol enable

Syntax Description This command has no other arguments or keywords.

Command Modes Configuration mode

Command History This command was introduced in Cisco MDS SAN-OS Release 1.0(2).

Usage Guidelines If the trunking protocol is disabled on a switch, no port on that switch can apply new trunk configurations. Existing trunk configurations are not affected—the TE port continues to function in trunking mode, but only supports traffic in VSANs that it negotiated previously (when the trunking protocol was enabled). Also, other switches that are directly connected to this switch are similarly affected on the connected interfaces. In some cases, you may need to merge traffic from different port VSANs across a non-trunking ISL. If so, you need to disable the trunking protocol.

Examples The following example shows how to enable and disable the trunk protocol feature.

```
switch# config t
switch(config)# trunk protocol enable
switch(config)# no trunk protocol enable
```