CHAPTER 15

S 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. Please see the Command Mode section to determine the appropriate mode for each command. For more information, see the *Cisco MDS 9000 Family Configuration Guide*.

- send
- setup
- snmp-server
- span session
- ssh key
- ssh server
- switchname
- system auto-sync
- system cores
- system default switchport trunk mode auto
- system switchover
- system trace

send

To send a message to all active CLI users currently using the switch, use the **send** command

send *line*

Syntax Description

line	The text of your message.

Defaults

None

Command Modes

Exec/

Usage Guidelines

This message is restricted to 80 alphanumeric characters with spaces.

Examples

This example sends a warning message to all active users about the switch being shut down.

```
switch# send Shutting down the system in 2 minutes. Please log off.

Broadcast Message from admin@excal-112
        (/dev/pts/3) at 16:50 ...

Shutting down the system in 2 minutes. Please log off.

switch
```

setup

To enter the swtich setup mode, use the **setup** command

setup

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Exec

Usage Guidelines

Refer to the *MDS 9000 Family Configuration Guide* for more information on using the setup command.

Examples

```
switch#  setup

---- Basic System Configuration Dialog ----

This setup utility will guide you through the basic configuration of
the system. Use ctrl-c to abort configuration dialog at any prompt.

Basic management setup configures only enough connectivity for
management of the system.

Would you like to enter the basic configuration dialog (yes/no): yes
```

The setup utility guides you through the basic configuration process. Type **Ctrl-c** at any prompt, to end the configuration process.

snmp-server

To set the contact information, switch location, and switch name, use the **snmp-server** command. Use the **no** form of the command to remove the system contact information.

snmp-server [community *snmp community string*]**[ro | rw] [contact** *name* **] [location** *location* **] [user** *name group* **auth md5** *password* **priv** *password* **| sha** *password* **priv** *password* **]**

SyntaxDescription

snmp-server	Set the contact information, switch location, and switch name
community	Set community string and access privs
snmp community string	SNMP community string (Max Size - 32
ro	Read-only access with this community string
rw	Read-write access with this community string
contact	Modify sysContact
name	Specify and modify sysContact
location	Modify sysLocation
location	Specify and modify sysLocation
user	Define a user who can access the SNMP engine
name	Name of the user
group	Group to which the user belongs (Max Size - 32)
auth	Authentication parameters for the user
md5	Use HMAC MD5 algorithm for authentication
password	Authentication pasword for user (Max Size - 64)
priv	Encryption parameters for the user
password	Privacy pasword for user (Max Size - 64)
sha	Use HMAC SHA algorithm for authentication
password	Authentication pasword for user (Max Size - 64)
localizedkey	Specifies that the passwords are in localized key format.

Defaults

The default is “ro.”

Command Modes

Configuration mode

Usage Guidelines

The localized keys are not portable across devices as they contain information on engineID of the device. If a configuration file is copied into the device, the passwords may not be set correctly if the configuration file was generated at a different device. So it is recommended that the passwords are explicitely configured to the desired passwords after copying the copfiguration into the device.

Examples

```
switch# config t
switch(config)# snmp-server contact NewUser
switch(config)#
```

```
switch(config)# no snmp-server contact NewUser
switch(config)#
switch(config)# snmp-server location SanJose
switch(config)#
switch(config)# no snmp-server location SanJose
switch(config)#
switch(config)# snmp-server name NewName
switch(config)#
switch(config)# no snmp-server name NewName
switch(config)#
switch(config)# snmp-server user joe network-admin auth sha abcd1234
switch(config)#
switch(config)# snmp-server user sam network-admin auth md5 abcdefgh
switch(config)#
switch112(config)# snmp-server user Bill network-admin auth sha abcd1234 priv abcdefgh
switch112(config)#
switch112(config)# no snmp-server user usernameA
switch112(config)# snmp-server user user1 network-admin auth md5 0xab0211gh priv
0x45abf342 localizedkey
```

span session

To configure a SPAN session, use the **span session** command. Use the **no** form of the command to remove the system contact information.

span session *session id* **[destination interface fc** *slot_number* **] [exit] [no] [source filter vsan** *range* **| interface fc** *slot_number*| **port-channel** *port channel number* **| sup-fc** *inband interface number* **|] [suspend]**

SyntaxDescription

span session	Enter SPAN session configuration
session id	Enter SPAN session id 1-16
destination	SPAN destination configuration
exit	Exit from this submode
interface	SPAN destination configuration
fc	Fiber Channel interface
slot_number	Slot number
no	Negate a command or set its defaults
source	SPAN source configuration
filter	SPAN session filter configuration
vsan	SPAN source vsan configuration
interface	SPAN source interface configuration
range	Enter a vsan range 1 - 4093
fc	Fiber Channel interface
slot_number	Slot number
port-channel	Port Channel interface
port channel number	Port Channel number 1-128
sup-fc	Inband Interface
inband interface number	Inband Intercace number 0-0
suspend	SPAN suspend session

Defaults

None.

Command Modes

Configuration mode

Usage Guidelines

None.

Examples

```
switch# config t
switch(config)# span session 1
switch(config-span)#
switch(config)# no span session 6
```

```
switch(config-span)# destination interface fc9/1
switch(config-span)# no destination interface fc1/5
switch(config-span)# source interface sup-fc0
switch(config-span)# source vsan1
switch(config-span)# source interface po1
switch(config-span)# no source interface po3
switch(config-span)# suspend
switch(config-span)# no suspend
switch(config-span)# exit
switch(config)# span session 1
switch(config-span)#
switch(config-span)# source interface fc9/1 tx filter vsan 1
switch(config-span)# source filter vsan 1-2
```

Related Commands

Command	Description
show span session	Displays all SPAN session information.
show span session *number*	Displays specific SPAN session information.

ssh key

To generate a host key, use the **ssh key** command.

ssh key dsa *number* | **rsa** *number* | **rsa1***number*

SyntaxDescription

ssh key	Generate a host key
dsa	Generate DSA keys
rsa	Generate RSA keys
rsa1	Generate RSA1 keys
number	Enter number of bits 768-2048

Defaults

Disabled

Command Modes

Configuration mode

Usage Guidelines

None.

Examples

```
switch# config t
switch(config)# ssh key rsa1 1024
generating rsa1 key.....
generated rsa1 key
switch(config)#
switch(config)# ssh key dsa 1024
generating dsa key.....
generated dsa key
switch(config)#
switch(config)# ssh key rsa 1024
generating rsa key.....
generated rsa key
switch(config)#
switch(config)# no ssh key rsa 1024
cleared RSA keys
switch(config)#
```

Related Commands

Command	Description
ssh server enable	Enable SSH server

ssh server

To enabe the SSH service, use the **ssh sever enable** command.

The **no** form of the command disables the SSH service.

SyntaxDescription

ssh sever	Configure SSH Server parameters
enable	Enable SSH server
no	Disable the SSH service

Defaults

Disabled

Command Modes

Configuration mode

Usage Guidelines

None.

Examples

```
switch# config t
switch(config)# ssh server enable
updated
switch(config)# no ssh server enable
updated
```

Related Commands

Command	Description
ssh key	Generate SSH Key.

switchname

To change the name of the switch, use the **switchname** command. The no form of te command reverts te switch name to default name.

switchname *name*

no switchname *name*

SyntaxDescription

switchname	Changes or assigns switch name
name	Enter switchname
no	Reverts the switch name prompt to its factory default (switch#)

Defaults

Disabled.

Command Modes

Configuration mode

Usage Guidelines

None.

Examples

```
switch# config t
switch(config)# switchname myswitch1
myswitch1(config)#
myswitch1(config)# no switchname
switch(config)#
```

Related Commands

Command	Description
snmp-server	Set the contact information, switch location, and switch name within the limit of 20 characters (without spaces)

system auto-sync

To synchronize the standby supervisor module software image with the bootflash image, use the **system auto-sync** command. The no form of this command disables auto syncing of the image.

system auto-sync image

no system auto-sync image

SyntaxDescription

system	System configuration commands
auto-sync image	System auto-sync image

Defaults

Disabled

Command Modes

Configuration mode

Usage Guidelines

None.

Examples

```
switch# config t
switch(config)# system auto-sync image
switch(config)# no system auto-sync image
Automatic synchronization of BOOT and KICKSTART is now disabled
switch(config)#
```

system cores

To copy the core and log files periodically, use the **system cores** command. The **no** form of this command reverts the switch to factory defaults.

system cores slot0 | tftp:

no system cores

SyntaxDescription

system	System configuration commands
cores	Copy cores to destination
no	Reverts to factory defaults
slot0	Select destination filesystem
tftp:	Select destination filesystem

Defaults

None.

Command Modes

Configuration mode

Usage Guidelines

Create any required directory before issuing this command. If the directory specified by this command does not exist, the switch software logs a syslog message each time a copy cores is attempted.

Examples

```
switch# config t
switch(config)# system cores slot0:coreSample
switch(config)#
switch(config)# no system cores
switch(config)#
```

Related Commands

Command	Description
show system cores	Displays the currently configured scheme for copying cores.

system default switchport trunk mode auto

To configure default values for various switchport attributes, use the **system default switchport** command.

system default switchport [shutdown] [trunk mode auto | off | on]

SyntaxDescription

system	System configuration commands
default	Configure system default values
switchover	Configure default values for switchport attributes
shutdown	Disable/enable switchports by default
trunk	Configure trunking parameters as a default
mode	Configure trunking mode
auto	Autosense trunking
off	Disable trunking
on	Enable trunking

Defaults

Enabled

Command Modes

Configuration mode

Usage Guidelines

Attributes configured using this command will be applied globally to all future switchport configurations, even if you do not individually specify them at that time.

Examples

```
switch# config t
switch(config)# system default switchport shutdown
switch(config-if)#
switch(config)# no system default switchport shutdown
switch(config-if)#
switch(config)# system default switchport trunkmode auto
switch(config-if)#
```

Related Commands

Command	Description
show system default switchport	Shows default values for switchport attributes.

system switchover

To specifically initiate a switchover from an active supervisor module to a standby supervisor module, use the **system switchover** command.

system switchover

SyntaxDescription

system	System configuration commands
switchover	To configure switchover for system
ha	Enables HA
warm	Enables warm switchover

Defaults

system switchover ha

Command Modes

Configuration mode

Usage Guidelines

Perform a switchover when the switch has two supervisor modules functioning in the switch . The **system switchover** command returns a `Failed to switchover: (supervisor has no standby)` message when the standby supervisor is not present in the switch.

Any switchover function is nonrevertive. Once a switchover has occurred and the failed processor has been replaced or successfully restarted, you can not switch back to the original, active supervisor module (unless there is a subsequent failure or you issue the **system switchover** command).

Examples

```
switch# config t
switch(config)#
switch(config)# system switchover warm
switch(config)# system switchover HA
switch(config)#
switch(config)# no system switchover
switch(config)#
```

Related Commands

Command	Description
show version compatibility	Determine version compatibility between switching modules.
show module	Display the HA-standby state for the standby supervisor module.
show system redundancy status	Determines whether the system is ready to accept a switchover.

system trace

To configure system trace level, use the **system trace** command.

system trace *subnet mask*

SyntaxDescription

system	System configuration commands
trace	System trace level
subnet mask	Select the mask.

Defaults

None.

Command Modes

Configuration mode

Usage Guidelines

None.

Examples

```
switch# config t
switch(config)#
switch(config)# system trace
???
```