



Z 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*.

- [zone copy, page 24-2](#)
- [zone default-zone, page 24-3](#)
- [zone merge, page 24-4](#)
- [zone name, page 24-5](#)
- [zoneset, page 24-7](#)

zone copy

To copy the active zone set to the full zoneset, use the **zone copy** command in EXEC mode. Use the **no** form of the command to negate the command or revert to the factory defaults.

```
zone copy active -zoneset full-zoneset [vsan vsan-id]
```

Syntax Description	active-zoneset	Copies from the active zone set.
	full-zoneset	Copies active zone set to full zone set.
	vsan	Configures to copy active zone set on a VSAN to full zone set.
	<i>vsan-id</i>	The ID of the VSAN is from 1 to 4093.

Defaults None.

Command Modes EXEC.

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

Usage Guidelines None.

Examples The following example copies the active zoneset to the full zoneset.

```
switch# zone copy active-zoneset full-zoneset vsan 1
```

zone default-zone

To define whether a default zone (nodes not assigned a created zone) permits or denies access to all in the default zone, use the **zone default-zone** command in configuration mode. Use the **no** form of the command to negate the command or revert to the factory defaults.

zone default-zone permit vsan *vsan-id*

Syntax Description		
	permit	Permits access to all in the default zone.
	vsan	Sets default zoning behavior for the specified VSAN.
	<i>vsan-id</i>	The ID of the VSAN is from 1 to 4093.

Defaults All default zones are permitted access.

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 permits default zoning in VSAN 2.

```
switch# config t
switch(config)# zone default-zone permit vsan 2
```

zone merge

To merge zone server databases, use the **zone merge** command. Use the **no** form of the command to negate the command or revert to the factory defaults.

zone merge interface [*fc slot-number* | **port-channel** *port-number*] **import** | **export vsan** *vsan-id*

Syntax Description		
	interface	Configures the interface.
	fc	Configures a Fibre Channel interface.
	<i>slot-number</i>	Specifies a slot number and port number.
	port-channel	A PortChannel interface.
	<i>port-number</i>	Specifies the PortChannel number.
	export	Exports the zone server database to the adjacent switch on the specified interface. The active zone set in this switch becomes the activated zone set of the merged SAN.
	import	Imports the zone server database to the adjacent switch on the specified interface. The active zoneset in the adjacent switch becomes the activated zone set of the merged SAN.
	vsan	Merges the zone server database of a VSAN on the specified interface.
	<i>vsan-id</i>	The ID of the VSAN is from 1 to 4093.

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 can be used to recover from link isolation due to zone merge failure.

Examples The following example merges zone server databases.

```
switch# zone merge interface port-channel 3 export vsan 3
```

zone name

To create a zone, use the **zone name** command in configuration mode. Use the **no** form of the command to negate the command or revert to the factory defaults.

```
zone name zone-name vsan vsan-id [ attribute read-only | member fcalias name | fcid fcid-value
| fwwn fwwn-value | interface fc slot-port ( swwn switch-wwn ) | lun number / pwwn
pwwn-value / symbolic-nodename name or ip-address ]
```

Syntax Description		
<i>zone-name</i>		Specifies the name of the zone. Maximum length is 64 characters.
vsan		Configures a zone on a VSAN.
<i>vsan-id</i>		The ID of the VSAN is from 1 to 4093.
attribute read-only	(Optional)	Sets read-only values for the selected zone (default is read-write).
member	(Optional)	Adds a member to zone.
fcalias	(Optional)	Adds fcalias to zone.
<i>fcalias-name</i>		Specifies the name of fcalias (Max Size - 64).
fcid		Adds FCID member to zone.
<i>fcid-value</i>		Specifies the FCID in the format 0xhhhhhh.
fwwn		Adds fabric port WWN member to zone.
<i>fwwn-value</i>		Specifies fabric port WWN in the format hh:hh:hh:hh:hh:hh:hh:hh.
interface fc		Specifies the switch's Fibre Channel interface as a zone member .
<i>slot-port</i>		Specifies a slot number and port number.
swwn <i>switch-wwn</i>		Configures an interface member based on the specified sWWN.
lun		Add LUN member to zone
<i>number</i>		Specifies the LUN number in hex format (64 in hex format corresponds to 100 in decimal format).
pwwn		Adds port WWN member to zone.
<i>pwwn-value</i>		Specifies port WWN in the format hh:hh:hh:hh:hh:hh:hh:hh.
symbolic-nodename		Adds the specified node name of IP address to the zone
<i>name</i>		Specifies the name of the device.
<i>ip-address</i>		Specifies the IP address of the device.

Defaults None.

Command Modes Configuration mode.

Command History This command was modified in Cisco MDS SAN-OS Release 1.2(1).

■ zone name

Usage Guidelines

Zones are assigned to zone sets, zone sets are then activated from one switch and propagate across the fabric to all switches. Zones allow security by permitting and denying access between nodes (hosts and storage). **zone name** commands are issued from the configuration mode. Configure a zone for a VSAN from the config-zone submode.

Use the **show wwn switch** command to retrieve the sWWN. If you do not provide a sWWN, the software automatically uses the local sWWN.

Examples

The following example configures a member for the specified zone (Zone1) based on the type (pWWN, fabric pWWN, FC ID, or FC alias) and value specified.

```
switch# config t
switch(config)# zone name Sample vsan 1
switch(config-zone)# member <type> <value>
pWWN example:
sswitch(config-zone)# member pwwn 10:00:00:23:45:67:89:ab
Fabric pWWN example:
switch(config-zone)# member fwwn 10:01:10:01:10:ab:cd:ef
FC ID example:
switch(config-zone)# member fcid 0xce00d1
FC alias example:
switch(config-zone)# member fcalias Payroll
```

zoneset

To group zones under one zoneset, use the **zoneset** command in configuration mode. Use the **no** form of the command to negate the command or revert to the factory defaults.

```
zoneset [activate name zoneset-name vsan vsan-id] [distribute full vsan vsan-id][name
zoneset-name vsan vsan-id]
```

Syntax Description		
	activate	Activate a zoneset
	name	Configures a zone set.
	<i>zoneset-name</i>	Specifies a name for a zone set. Maximum length is 64 characters.
	distribute full	Enables zone set propagation
	vsan	Activates a zone set on the specified VSAN. The id of the VSAN (1-4096).
	<i>vsan-id</i>	The ID of the VSAN is from 1 to 4093.

Defaults None.

Command Modes Configuration mode.

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

Usage Guidelines Zones are activated by activating the parent zone set.

Examples The following example activates a zoneset named gottons in VSAN 333.

```
switch# conf t
Enter configuration commands, one per line. End with CNTL/Z.
switch(config)# zoneset ?
  activate  Activates a zoneset
  distribute Enable zoneset propagation
  name      Configures a zoneset

switch(config)# zoneset name gottons ?
  vsan      Configures a zoneset on a VSAN

switch(config)# zoneset activate name gottons vsan 333
Zoneset Activation initiated. check zone status
```

