<p align="right">C H A P T E R **21**</p>

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. 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*.

- zone copy
- zone default-zone
- zone merge
- zone name
- zoneset

zone copy

To copy the active zoneset to the full zoneset, use the **zone copy** command.

zone copy *active -zoneset full-zoneset* **[vsan** *integer***]**

Syntax Description		
	active-zoneset	The zone name of the active zoneset.
	full-zoneset	The zone name of the full zoneset.
	vsan	Indicates that the active-zoneset.
	integer	The id of the VSAN (1-4096).

Defaults   None

Command Modes   EXEC

Usage Guidelines   None.

Examples
```
switch# zone copy test1 test2  in default vsan only (vsan1)
switch#
```

zone default-zone

To define whether a default zone (nodes not assigned a created zone) will permit or deny access to all in the default zone, use the **zone default-zon**e command. Use the **no** form of this command to deny.

zone default-zone permit vsan *number*

Syntax Description	
zone	Zone configuration command.
default-zone	Define default zoning behavior.
permit	Default permit.
vsan	Defines default zoning behavior for the specified VSAN.
number	The ID of the VSAN (1-4096).

Defaults   **permit**

Command Modes   Configuration

Usage Guidelines   None

Examples
```
switch# config t
switch(config)# zone ?
  default-zone  Defines default zoning behavior
  name          Configure a zone

switch(config)# zone default-zone ?
  permit  Default permit

switch(config)# zone default-zone permit ?
  vsan  Defines default zoning behavior for the specified VSAN

switch(config)# zone default-zone permit vsan ?
  <1-4093>  VSAN id range

switch(config)# zone default-zone permit vsan 2 ?
  <cr>  Carriage Return
```

zone merge

To merge zone server databases, use the **zone merge** command. This command can be used to recover from link isolation due to zone merge failure

zone merge interface [fc | port-channel] *integer* **{import | export} vsan** *vsan int range*

Syntax Description		
	interface	The name of the interface.
	fc *integer*	A Fibre Channel interface. The *integer* is the slot number.
	port-channel *integer*	A Port Channel interface. The *integer* is the Port Channel number.
	export	Exports the zone server database to the adjacent switch on the specified interface. The active zoneset in this switch becomes the activated zoneset 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 zoneset of the merged SAN.
	vsan	Merges the zone server database of a VSAN on the specified interface.
	vsan int range	The id of the VSAN (1-4096).

Defaults   None

Command Modes   EXEC

Usage Guidelines   None.

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

zone name

To create a zone, use the **zone name** command.

zone name *name* **vsan** *number* **[exit] [member fcalias** *name* **| fcid** *value* **| fwwn** *value* **| pwwn**
value **] [no]**

Syntax Description

zone	Zone configuration command.
name	Configuration zone.
name	Enter the name of zone (Max Size - 64).
vsan	Configure a zone on a VSAN.
number	The ID of the VSAN (1-4096).
exit	Exit from this submode
member	Add a member to zone
fcalias	Add fcalias to zone
name	Enter the name of fcalias (Max Size - 64)
fcid	Add FCID member to zone
fwwn	Add Fabric Port WWN member to zone
pwwn	Add Port WWN member to zone
no	Negate a command or set its defaults

Defaults   None

Command Modes   Configuration

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

Examples
```
switch# config t
switch(config)# zone name ?
  <WORD>  Enter the name of zone (Max Size - 64)

switch(config)# zone name Somename ?
  vsan  Configure a zone on a VSAN

switch(config)# zone name Somename vsan ?
  <1-4093>  VSAN id
switch(config)# zone name somename vsan 1
switch(config-zone)# ?
Configure a zone for a VSAN:
  exit    Exit from this submode
  member  Add a member to zone
```

```
         no     Negate a command or set its defaults

switch(config-zone)# ?
Configure a zone for a VSAN:
  exit    Exit from this submode
  member  Add a member to zone
  no      Negate a command or set its defaults

switch(config-zone)# member ?
  fcalias  Add fcalias to zone
  fcid     Add FCID member to zone
  fwwn     Add Fabric Port WWN member to zone
  pwwn     Add Port WWN member to zone

switch(config-zone)# member fcalias ?
  <WORD>  Enter the name of fcalias (Max Size - 64)

switch(config-zone)# member fcalias aabb ?
  <cr>  Carriage Return

switch(config-zone)# member fcalias aabb
Alias not present
switch(config-zone)# member fcid ?
  <0xhhhhhh>  Enter FCID

switch(config-zone)# member fwwn ?
  <hh:hh:hh:hh:hh:hh:hh:hh>  Enter Fabric Port WWN

switch(config-zone)# member pwwn ?
  <hh:hh:hh:hh:hh:hh:hh:hh>  Enter Port WWN

switch(config-zone)# member pwwn
```

zoneset

To group zones under one zoneset, use the **zoneset** command.

> **zoneset** [**activate name** *name* **vsan** *number*] [**distribute full vsan** *vsan-id*][**name** *string* **vsan** *vsan-id*]

Syntax Description

zoneset	Zoneset configuration command.
activate	Activate a zoneset
name	Zoneset name.
name	Enter name for zoneset.
distribute full	Enable zoneset propagation
name	Configure a zoneset
vsan	Activate a zoneset on the specified VSAN. The id of the VSAN (1-4096).
number	The id of the VSAN (1-4096).

Defaults

None

Command Modes

Configuration

Usage Guidelines

Zones are activated by activating the parent Zoneset.

Examples

```
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 ?
  <WORD>  Enter the name of zoneset

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

switch(config)# zoneset name gottons vsan 333
switch(config-zoneset)# ?
Configures a zoneset for a VSAN:
  exit    Exit from this submode
  member  Add zone to zoneset
  no      Negate a command or set its defaults
  zone    Configures an __inline__  zone


switch(config-zoneset)# member getsome

switch(config)# zoneset activate name gottons vsan 333
```

Cisco MDS 9000 Family Command Reference ■

```
Zoneset Activation initiated. check zone status
switch(config)#
```