



V 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*.

- [vsan database, page 22-2](#)
- [vsan policy deny, page 22-4](#)
- [vrrp, page 22-5](#)

vsan database

To create multiple fabrics sharing the same physical infrastructure, to assign which ports are in which VSAN, whether Interop mode is on or off, and whether load balancing is per exchange or src-dest ID., use the **vsan** command.

```
vsan database [exit] [no] [vsan vsan-id interface fc slot-number | port-channel port-number]
[vsan vsan-id interop loadbalancing src-dst-id | src-dst-ox-id] [vsan vsan-id loadbalancing
src-dst-id | src-dst-ox-id] [vsan vsan-id name name interop loadbalancing src-dst-id |
src-dst-ox-id] [vsan vsan-id name name loadbalancing src-dst-id | src-dst-ox-id] [vsan
vsan-id suspend interop | loadbalancing] [vsan vsan-id suspend]
```

Syntax Description		
exit		Exits from submode.
no		Negates a command or sets its defaults.
vsan		Configures VSAN information or membership.
<i>vsan-id</i>		The ID of the VSAN is from 1 to 4093.
interface		Adds interfaces to VSAN.
fc		Configures Fiber Channel interface.
<i>slot_number</i>		Specifies a slot number and port number.
port-channel		Configures PortChannel interface.
<i>port-number</i>		Specifies PortChannel number.
interop		Turns on interoperability mode.
loadbalancing		Configures loadbalancing scheme.
src-dst-id		Sets src-id/dst-id for loadbalancing.
src-dst-ox-id		Sets ox-id/src-id/dst-id for loadbalancing (default).
suspend		Suspends VSAN.

Defaults None.

Command Modes Configuration mode.

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

Usage Guidelines Change to the VSAN database submode to issue this command.

Examples

The following examples show how to create multiple fabrics sharing the same physical infrastructure and to assign which ports are in which VSAN.

```
switch# config t
switch(config)# vsan database
switch(config-db)#
switch-config-db# vsan 2
switch(config-vsan-db)#
switch(config-vsan-db)# vsan 2 name TechDoc
updated vsan 2
switch(config-vsan-db)#
switch(config-vsan-db)# vsan 2 loadbalancing src-dst-id
switch(config-vsan-db)#
switch(config-vsan-db)# vsan 2 loadbalancing src-dst-ox-id
switch(config-vsan-db)#
switch(config-vsan-db)# vsan 2 suspend
switch(config-vsan-db)#
switch(config-vsan-db)# no vsan 2 suspend
vs.-config-vsan-db#
switch(config-vsan-db)# end
switch#
```

vsan policy deny

To configure a vsan-based role, use the **vsan policy deny** command in configuration mode. Use the **no** form of this command to delete a configured role.

```
vsan policy deny {permit vsan vsan vsan-id }
```

```
no vsan policy deny {permit vsan vsan vsan-id }
```

Syntax Description	Command	Description
	vsan policy deny	Configures VSAN based roles.
	<i>vsan-id</i>	The ID of the VSAN is from 1 to 4093.
	permit	Remove commands from the role.

Defaults Permit.

Command Modes Configuration mode—role name submode.

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

Usage Guidelines You can configure a role so that it only allows commands to be performed for a selected set of VSANs. By default, the VSAN policy of a role is **permit**. In other words, the role can perform commands configured by the **rule** command in all VSANs. In order to selectively allow VSANs for a role, the VSAN policy needs to be set to **deny** and then the appropriate VSANs need to be permitted.

Examples The following example places you in sangroup role submode.

```
switch# config t
switch(config)# role name sangroup
switch(config-role)#
```

The following example changes the VSAN policy of this role to deny and places you in a submode where VSANs can be selectively permitted.

```
switch(config)# vsan policy deny
switch(config-role-vsan)
```

The following example deletes the configured VSAN role policy and reverts to the factory default (permit).

```
switch(config-role)# no vsan policy deny
```

The following example permits this role to perform the allowed commands for VSANs 10 through 30.

```
switch(config-role)# permit vsan 10-30
```

The following example removes the permission for this role to perform commands for vsan 15 to 20.

```
switch(config-role-vsan)# no permit vsan 15-20
```

vrrp

To enable VRRP, use the **vrrp** command in configuration mode. Use the **no** form of the command to revert to the factory defaults or to negate a command.

```
vrrp vrrp-number
    [address | advertisement-interval | authentication | preempt | priority | shutdown | track]
```

```
no vrrp vrrp-number
    [address | advertisement-interval | authentication | preempt | priority | shutdown | track]
```

Syntax Description		
vrrp <i>vrrp-number</i>		Configures a VRRP on the selected VSAN or management interface
address		Adds or removes an IP address to the virtual router.
advertisement-interval		Sets the time interval between advertisements.
authentication		Sets the authentication method.
preempt		Enables preemption of lower priority master.
priority	[1-254]	Configure the virtual router priority.
shutdown		Enables or disables a virtual router.
track		Tracks the availability of another interface.

Defaults Disabled.

Command Modes Configuration mode.

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

Usage Guidelines Enter the Virtual Router configuration submode to access the options for this command. From the VSAN or mgmt0 (management) interface configuration submode, enter **vrrp** *number* to enter the `switch(config-if-vrrp)#` prompt. By default, a virtual router is always disabled (**shutdown**). VRRP can be configured only if this state is disabled. Be sure to configure at least one IP address before attempting to enable a VR.

Refer to the Cisco MDS 9000 Family Configuration Guide.

Examples

The following example enables VRRP configuration.

```
switch(config-if-vrrp)# no shutdown
```

The following example disables VRRP configuration.

```
switch(config-if-vrrp)# shutdown
```

The following example configures an IP address for the selected VRRP.

```
switch# config t
switch(config)# interface vsan 1
switch(config-if)# vrrp 250
switch(config-if-vrrp)# address 10.0.0.10
```