

F 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*.

- fcalias
- fcanalyzer
- fcc
- fcdomain
- fcdropl latency
- fcflow stats
- fcinterop fcid-allocation
- fcinterop loop-monitor
- fcns
- fcping
- fcroute
- fcs
- fctimer
- fctrace
- find
- format
- fsfp config

fcalias

Send documentation comments to mdsfeedback-doc@cisco.com.

fcalias

To configure an FC alias, use the **fcalias** command.

fcalias name alias name vsan number

The **no** form of this command disables the daylight saving time adjustment feature.

Syntax Description	fcalias name Configures an FC alias for a member for the specified vsan. <i>alias name</i> Enters the name of fcalias (Max Size - 64) vsan Configures an fcalias on a VSAN <i>number</i> Enters VSAN number 1-4093
---------------------------	---

Defaults	None
-----------------	------

Command Modes	Configuration mode
----------------------	--------------------

Usage Guidelines	To include multiple members in any alias using the FC ID, fWWN, or pWWN values.
-------------------------	---

Examples	<pre>switch# config t switch(config)# fcalias name AliasSample vsan 3 switch-config-fcalias# switch-config-fcalias# member fcid 0x222222 switch-config-fcalias# switch-config-fcalias# member pwwn 10:00:00:23:45:67:89:ab switch-config-fcalias# switch-config-fcalias# member fwwn 10:01:10:01:10:ab:cd:ef switch-config-fcalias#</pre>
-----------------	---

Related Commands	Command Description
	member fcid type value Configures alias member for a specified zone.
	member pwwn Configures alias members based on the specified port WWN type and value.
	member fwwn Configures alias members based on the specified fWWN type and value.

Send documentation comments to mdsfeedback-doc@cisco.com.

fcanalyzer

To configure the Cisco Fabric Analyzer by issuing the **fcanalyzer** commands.

fcanalyzer [local brief | display-filter | limit-frame-size | limit-captured-frames write] [remote ip_address active port_number] .

Syntax Description	fcanalyzer local Begins capturing the frames locally (supervisor module).
local brief	Displays the protocol summary in a brief format.
display-filter	Displays the filtered frames
limit-frame-size	Limits the size of the frame capture to the first 64 bytes. The allowed range is 64 to 65536 bytes.
limit-captured-frames	Limits the number of frames captured to 10. The allowed range is 0 to 2147483647 frames and the default is 100 frames. Use 0 if you do not want to limit the captures frames.
write	Saves the captured frames to a specified file.
remote	Configures the remote IP address to which the captured frames will be sent.
<i>ip_address</i>	IP address or hostname (Max Size - 1024)
active	Enables active mode (passive is the default) with the remote host.
<i>port_number</i>	Port number

Defaults	None.
Command Modes	Configuration mode
Usage Guidelines	You can capture Fibre Channel control traffic from a switch and decode it without having to disrupt connectivity and without having to be local to the point of analysis.

Examples	<pre> switch# config t 3switch(config)# fcanalyzer local Capturing on eth2 switch(config)# switch(config)# fcanalyzer local brief Capturing on eth2 switch(config)# switch(config)# fcanalyzer local display-filter SampleF Capturing on eth2 switch(config)# switch(config)# fcanalyzer local limit-frame-size 64 Capturing on eth2 switch(config)# switch(config)# fcanalyzer local limit-captured-frames 10 Capturing on eth2 switch(config)# switch(config)# fcanalyzer local write SampleFile Capturing on eth2 switch(config)# </pre>
-----------------	---

■ port_number

Send documentation comments to mdsfeedback-doc@cisco.com.

```
3switch(config)# fcanalyzer remote 10.21.0.3
Capturing on eth2
switch(config)#
switch(config)# fcanalyzer remote 10.21.0.3 active
Capturing on eth2
```

Related Commands	Command	Description
	clear fcanalyzer	Clear the entire list of configured hosts
	show fcanalyzer	Displays the list of hosts configured for a remote capture

Send documentation comments to mdsfeedback-doc@cisco.com.

fcc

To assign Fibre Channel Congestion Control priority, use the **fcc priority** command in configuration mode.

fcc [priority number]

Syntax Description	<table border="1"> <tr> <td>fcc</td><td>Enables FCC for the entire switch.</td></tr> <tr> <td>priority</td><td>Assigns FCC priority for the entire switch.</td></tr> <tr> <td><i>number</i></td><td>The FCC priority threshold, with 0 being the lowest and 7 being the highest.</td></tr> </table>	fcc	Enables FCC for the entire switch.	priority	Assigns FCC priority for the entire switch.	<i>number</i>	The FCC priority threshold, with 0 being the lowest and 7 being the highest.
fcc	Enables FCC for the entire switch.						
priority	Assigns FCC priority for the entire switch.						
<i>number</i>	The FCC priority threshold, with 0 being the lowest and 7 being the highest.						
Defaults	Disabled (when enabled, what is default priority?)						
Command Modes	Configuration mode						
Usage Guidelines	FCC reduces the congestion in the traffic without interfering with standard Fibre Channel protocol.						
Examples	<pre>switch# config t switch(config)# fcc priority 2 switch(config-if)# </pre> Get new example						
Related Commands	<table border="1"> <thead> <tr> <th>Command</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>show fcc</td> <td>Displays FCC settings</td> </tr> </tbody> </table>	Command	Description	show fcc	Displays FCC settings		
Command	Description						
show fcc	Displays FCC settings						

fcdomain

Send documentation comments to mdsfeedback-doc@cisco.com.

fcdomain

To configure the Fibre Channel domain feature, use the **fcdomain** command.

```
fcdomain [ auto-reconfigure vsan number ] [ contiguous-allocation vsan number ] [ domain id
preferred vsan number | static c ] [ fabric-name name ] [ fcid database vsan number | persistent vsan
number ] [ priority value vsan number ] [ restart disruptive vsan number ] [ vsan number ] [ restart
vsan number ] [vsan number ]
```

no form of this command, disables the FC domain.

Syntax Description	
fcdomain	Define the FCC priority threshold with 0 being the lowest and 7 being the highest.
auto-reconfigure	Configure the autoreconfigure option.
vsan	Enable the automatic reconfiguration option in specified VSAN.
<i>number</i>	Specify the VSAN id 1-4093.
contiguous-allocation	Configure the contiguous allocation option.
vsan	Enables the contiguous allocation option in specified VSAN.
<i>number</i>	Specify the VSAN id 1-4093.
domain	Configures the domain id and its type.
<i>id</i>	Specify the domain id 0-239.
preferred	Configures the domain id as preferred
vsan	Apply preferred domain id to VSAN.
<i>number</i>	Specify the VSAN id 1-4093
static	Configures the domain id as static
vsan	Apply static domain id to VSAN.
<i>number</i>	Specify the VSAN id 1-4093
fabric-name	Configure the fabric name.
<i>name</i>	Configure the fabric name value.
vsan	Apply fabric name to VSAN.
<i>number</i>	Specify the VSAN id 1-4093
fcid	Configure fcdomain persistent FCIDs
database	Enters persistent FCIDs submode
vsan	Apply FC id database to VSAN.
<i>number</i>	Specify the VSAN id 1-4093
persistent	Enables or disables fcdomain persistent FCIDs
vsan	Apply FC id persistent to VSAN.
<i>number</i>	Specify the VSAN id 1-4093
priority	Specify the FC domain priority value ranging from 1-254.
<i>value</i>	Enter value.
vsan	Apply the FC domain priority value to VSAN.
<i>number</i>	Specify the VSAN id 1-4093.
restart disruptive	Force the disruptive fabric reconfiguration option.

Send documentation comments to mdsfeedback-doc@cisco.com.

vsan	Apply the disruptive fabric reconfiguration to a VSAN.
number	Specify the VSAN id 1-4093.
restart	Start a disruptive or non-disruptive reconfiguration
vsan	Apply the disruptive or non-disruptive fabric reconfiguration to a VSAN.
number	Specify the VSAN id 1-4093.
vsan	Configure FC domain for a specified the VSAN.
number	Specify the VSAN id 1-4093.

Defaults	Enabled
Command Modes	Configuration mode
Usage Guidelines	Used to select the principle switch, domain ID distribution, reconfigure fabric, and allocate FC IDs.
Examples	<pre>switch# config t switch(config)# switch(config)# fcdomain domain 3 preferred vsan 87 switch(config)# switch(config)# no fcdomain domain 3 preferred vsan 87 switch(config)# switch(config) no fcdomain domain 2 static vsan 237 switch(config)# switch(config) no fcdomain domain 2 static vsan 237 switch(config)# switch(config) fcdomain restart vsan 1 switch(config)# switch(config)# switch(config) fcdomain restart disruptive vsan 1 switch(config)# switch(config)# switch(config) fcdomain priority 25 VSAN 99 switch(config)# switch(config) no fcdomain priority 25 VSAN 99 switch(config)# switch(config)# switch(config) fcdomain auto-reconfigure vsan 10 switch(config)# switch(config)# switch(config) fcdomain contiguous-allocation vsan 81-83 switch(config)# switch(config) no fcdomain contiguous-allocation vsan 1030 switch(config)# switch(config)# switch(config) fcdomain fabric-name 20:1:ac:16:5e:0:21:01 vsan 3 switch(config)# switch(config) no fcdomain fabric-name 20:1:ac:16:5e:0:21:01 vsan 3010 switch(config)# </pre>

Related Commands	Command	Description
	show fcdomain	Displays global information about the fcdomain configurations.

fcdroplatency

Send documentation comments to mdsfeedback-doc@cisco.com.

fcdroplatency

To configure the network and switch drop latency time, use the **fcdroplatency** command.

fcdroplatency [network *milliseconds* | switch *milliseconds*]

no form of this command, disables the FC latency.

Syntax Description	fcdroplatency Enables the automatic reconfiguration option in specified VSAN. network <i>milliseconds</i> Configures network latency in 0-2147483647 milliseconds. switch <i>milliseconds</i> Configures switch latency in 0-2147483647 milliseconds.				
Defaults	Disabled				
Command Modes	Configuration mode				
Usage Guidelines	None.				
Examples	<pre>switch# config t switch(config)# switch(config)# fcdroplatency network 5000 switch(config)# switch(config)# no fcdroplatency network switch(config)# switch(config)# fcdroplatency switch 4000 switch(config)# switch(config)# no fcdroplatency switch switch(config)# </pre>				
Related Commands	<table border="1"> <thead> <tr> <th>Command</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>show fcdroplatency</td> <td>Displays the configured latency parameters.</td> </tr> </tbody> </table>	Command	Description	show fcdroplatency	Displays the configured latency parameters.
Command	Description				
show fcdroplatency	Displays the configured latency parameters.				

Send documentation comments to mdsfeedback-doc@cisco.com.

fcflow stats

To configure fcflow statistics, use the **fcflow stats** command. Use the **no** form of this command to disable the counter.

fcflow stats {aggregated module *module-number* | module *module-number*}

Syntax Description	aggregated Configures aggregated fcflow statistics. module <i>module-number</i> The number of the module for which fcflow statistics are to be cleared. The module number is a number from 1-9.
Defaults	None.
Command Modes	Configuration
Usage Guidelines	None.
Examples	<pre>switch-config# fcflow stats aggregated module 1 switch-config# switch(config)# no fcflow stats aggregated module 1 index 1005 vsan 1 switch(config)# </pre>

fcinterop fcid-allocation

Send documentation comments to mdsfeedback-doc@cisco.com.

fcinterop fcid-allocation

To allocate FC ids on the switch, use the **fcinterop fcid-allocation** command.

fcinterop [fcid-allocation auto | flat | none]

Syntax Description	fcinterop Enables the automatic reconfiguration option in specified VSAN.
fcid-allocation	Sets single fcid interop mode.
auto	Assign single fcid to compatible HBA's.
flat	flat Assign single fcid.
none	Assign fcid range

fcinteropfcid-allocation auto

Command Modes Configuration mode

fcinterop fcid-allocation command is used to save FC IDs used on a switch.

Related Commands	Command	Description
	show flogi database	Verify if a storage device is displayed in the Fabric login (FLOGI) table

Send documentation comments to mdsfeedback-doc@cisco.com.

fcinterop loop-monitor

To monitor remove of discs from a loop port, use the **fcinterop loop-monitor** command.

fcinterop loop-monitor

no form of this command disables the loop monitoring.

Syntax Description	fcinterop Enables the automatic reconfiguration option in specified VSAN. loop-monitor Set monitoring of NL ports in loop.				
Defaults	Disabled				
Command Modes	Configuration mode				
Usage Guidelines	fcinterop loop-monitor command is used to detect devices that are removed from a looped port.				
Examples	<pre>switch# config t switch(config)# switch(config)# fcinterop loop-monitor switch(config)# no fcinterop loop-monitor</pre>				
Related Commands	<table border="1"> <thead> <tr> <th>Command</th><th>Description</th></tr> </thead> <tbody> <tr> <td>show flogi database</td><td>Verify if a storage device is displayed in the Fabric login (FLOGI) table.</td></tr> </tbody> </table>	Command	Description	show flogi database	Verify if a storage device is displayed in the Fabric login (FLOGI) table.
Command	Description				
show flogi database	Verify if a storage device is displayed in the Fabric login (FLOGI) table.				

fcns

Send documentation comments to mdsfeedback-doc@cisco.com.

fcns

To register name server proxy, use the **fcns proxy-port** command.

fcns [proxy-port wwn_address | [vsan number]

Syntax Description	
fcns proxy-port	Registers port world wise name.
wwn_address	World wide name address
vsan	Configures a proxy port for the specified VSAN.
number	VSAN number

Defaults	None
-----------------	------

Command Modes	Configuration mode
----------------------	--------------------

Examples	<pre>switch# config t switch(config)# switch(config)# fcns proxy-port 21:00:00:e0:8b:00:26:d switch(config)# switch(config)# fcns proxy-port 21:00:00:e0:8b:00:26:d vsan 2 switch(config)# </pre>
-----------------	---

Related Commands	Command	Description
	show fcns	Displays the name server database and statistical information for a specified VSAN or for all VSANS

Send documentation comments to mdsfeedback-doc@cisco.com.

fcping

To ping an N-port with a specified FC-id, use the **fcping fcid** command.

fcping {fcid *fc-id* vsan *vsan-id* [count *integer* | timeout *value* | usr-priority] | pwwn *wwn-id*}

Syntax Description

fc id	The FC-ID of the destination N-port.
<i>fc-id</i>	The port FC-ID, with the format <i>0xhhhhhh</i> .
pwwn	The PWWN of the destination N-port.
<i>wwn-id</i>	The port WWN, with the format <i>hh:hh:hh:hh:hh:hh:hh:hh</i> .
vsan <i>vsan-id</i>	The VSAN ID of the destination N-port (1-4096).
count <i>integer</i>	Number of frames to send. A value of 0 sends forever.
timeout	The timeout value.
usr-priority	The priority the frame receives in the switch fabric.

Defaults

None.

Command Modes

Exec.

Usage Guidelines

None.

Examples

This example shows a fcping operation for the specified pWWN or the FCID of the destination. By default, five frames are sent.

```
switch# fcping fcid 0xd70000 vsan 1
28 bytes from 0xd70000 time = 730 usec
28 bytes from 0xd70000 time = 165 usec
28 bytes from 0xd70000 time = 262 usec
28 bytes from 0xd70000 time = 219 usec
28 bytes from 0xd70000 time = 228 usec

5 frames sent, 5 frames received, 0 timeouts
Round-trip min/avg/max = 165/270/730 usec
```

This example shows the setting of the number of frames to be sent using the count option. The range is from 0 through 2147483647. A value of 0 will ping forever.

```
switch# fcping fcid 0xd70000 vsan 1 count 10
28 bytes from 0xd70000 time = 730 usec
28 bytes from 0xd70000 time = 165 usec
28 bytes from 0xd70000 time = 262 usec
28 bytes from 0xd70000 time = 219 usec
28 bytes from 0xd70000 time = 228 usec
28 bytes from 0xd70000 time = 230 usec
28 bytes from 0xd70000 time = 230 usec
28 bytes from 0xd70000 time = 225 usec
28 bytes from 0xd70000 time = 229 usec
```

fcping

Send documentation comments to mdsfeedback-doc@cisco.com.

```
28 bytes from 0xd70000 time = 183 usec
10 frames sent, 10 frames received, 0 timeouts
Round-trip min/avg/max = 165/270/730 usec
```

This example shows the setting of the timeout value. The default period to wait is 5 seconds. The range is from 1 through 10 seconds.

```
switch# fcping fcid 0xd500b4 vsan 1 timeout 10
28 bytes from 0xd500b4 time = 1345 usec
28 bytes from 0xd500b4 time = 417 usec
28 bytes from 0xd500b4 time = 340 usec
28 bytes from 0xd500b4 time = 451 usec
28 bytes from 0xd500b4 time = 356 usec

5 frames sent, 5 frames received, 0 timeouts
Round-trip min/avg/max = 340/581/1345 usec
```

This command shows the issue of a No response from the N port message even when the N port or NL port is active. This is due to resource exhaustion at the N port or NL port. Retry the command a few seconds later.

```
switch# fcping fcid 0x010203 vsan 1
No response from the N port.

switch# fcping pwnn 21:00:00:20:37:6f:db:dd vsan 1
28 bytes from 21:00:00:20:37:6f:db:dd time = 1454 usec
28 bytes from 21:00:00:20:37:6f:db:dd time = 471 usec
28 bytes from 21:00:00:20:37:6f:db:dd time = 372 usec
28 bytes from 21:00:00:20:37:6f:db:dd time = 364 usec
28 bytes from 21:00:00:20:37:6f:db:dd time = 1261 usec

5 frames sent, 5 frames received, 0 timeouts
Round-trip min/avg/max = 364/784/1454 usec
```

Send documentation comments to mdsfeedback-doc@cisco.com.

fcroute

To configure Fibre Channel routes, use the **fcroute** command.

fcroute [FCID FC ID_network mask | interface type [domain number| metric number | remote | vsan vsan-id]]

Syntax Description

fcroute	Registers port world wide name.
interface	Configures the route for the specified Fibre Channel interface.
domain	Configures the route for the specified Fibre Channel domain.
metric	Assigns the cost of the route. Default cost is 10.
vsan vsan-id	Configures the static route for a specific vsan.
remote	Configures the static route for a destination switch remotely connected.

Defaults

None

Command Modes

Configuration mode

Usage Guidelines

Use this command to assign forwarding information to the switch.

Examples

```
switch# config t
switch(config)#
switch(config)# fcroute 0x111211 interface fc1/1 domain 3 vsan 2
switch(config)#
switch(config)# fcroute 0x111211 interface port-channel 1 domain 3 vsan 4
switch(config)#
switch(config)# fcroute 0x031211 interface fc1/1 domain 3 metric 1 vsan 1
switch(config-if)#
switch(config)# fcroute 0x111112 interface fc1/1 domain 3 metric 3 remote vsan 3
```

Related Commands

Command	Description
show fcroute	Displays Fibre Channel routes.

fcs

Send documentation comments to mdsfeedback-doc@cisco.com.

fcs

To perform platform and node name checking fabric wide, and register FCS attributes, use the **fcs** command.

fcs {plat-check-global vsan *vsan_number* | register [exit | no | platform] VSANname *name* }

Syntax Description

fcs	Registers port world wise name.
plat-check-global vsan	Platform Name/Node Name checking
register	Registers FCS attributes
exit	Exits submode
no	Negate a command or set its defaults
platform	Platform Object Registration
vsan <i>name</i>	Name of the Platform

Defaults

None.

Command Modes

Configuration mode

Usage Guidelines

None.

Examples

```
switch## config t
switch(config)##
switch(config)## fcs plat-check-global vsan 2
switch (config)## fcs register
switch (config-fcs-register)## platform name
```

Related Commands

Command	Description
show fcs	Displays Fabric Configuration Server information.

Send documentation comments to mdsfeedback-doc@cisco.com.

fctimer

To change the default Fibre Channel timers, use the **fctimer** command.

fctimer {D_S_TOV *milliseconds* | E_D_TOV *milliseconds* | R_A_TOV *milliseconds* F_S_TOV *milliseconds*}

Syntax Description

fctimer	Configures Fibre Channel timers
D_S_TOV	D_S_TOV in milliseconds(5000-100000)
E_D_TOV	E_D_TOV in milliseconds(1000-100000) default 2000
R_A_TOV	R_A_TOV in milliseconds(5000-100000) default 10,000
F_S_TOV	F_S_TOV in milliseconds.
<i>milliseconds</i>	milliseconds

Defaults

RA_TOV default is 10 seconds and **ED_TOV** default is 2 seconds

Command Modes

Configuration mode

Usage Guidelines

The Cisco MDS 9000, Brocade, and McData FC Error Detect (ED_TOV) and Resource Allocation (RA_TOV) timers default to the same values. They can be changed if needed. The RA_TOV default is 10 seconds, and the ED_TOV default is 2 seconds. Per the FC-SW2 standard, these values must be the same on each switch within in the fabric.

Examples

```
switch# config t
switch(config)#
switch(config)# fctimer e_d_tov ?
<1000-100000> E_D_TOV in milliseconds(1000-100000)
switch(config)# fctimer r_a_tov ?
<5000-100000> R_A_TOV in milliseconds(5000-100000)
```

Related Commands

Command	Description
show fctimer	Displays information.

fctrace

Send documentation comments to mdsfeedback-doc@cisco.com.

fctrace

To trace the route to an N-port, use the **fctrace** command.

fctrace [fcid *fcid* vsan *vsan-id* [timeout *value*] | pwwn *wwn-id*]

Syntax Description	
fc id	The FC-ID of the destination N-port.
<i>fc-id</i>	The port FC-ID, with the format <i>0xhhhhhh</i> .
pwwn	The PWWN of the destination N-port.
<i>wwn-id</i>	The port WWN, with the format <i>hh:hh:hh:hh:hh:hh:hh:hh</i> .
vsan <i>vsan-id</i>	The VSAN ID of the destination N-port (1-4096).
timeout <i>value</i>	The timeout value.

Defaults None.

Command Modes Exec.

Usage Guidelines None.

Examples

```
switch# fctrace fcld 0x660000 vsan 1
Route present for : 0x660000
20:00:00:05:30:00:5f:1e(0xffffc65)
Latency: 0 msec
20:00:00:05:30:00:61:5e(0xffffc66)
Latency: 0 msec
20:00:00:05:30:00:61:5e(0xffffc66)
switch#
```

Send documentation comments to mdsfeedback-doc@cisco.com.

find

To display a list of files on a file system, use the **find** command.

find *filename*

Syntax Description	<i>filename</i> File names with the specified characteristics.						
Defaults	None						
Command Modes	EXEC						
Usage Guidelines	Use the find (Flash file system) command to display more detail about the files in a particular file system.						
Examples	The following is sample output of all files that begin with the alphabet <i>a</i> : <pre>switch# find a ./accountingd ./acl ./ascii_cfg_server ./arping</pre>						
Related Commands	<table border="1"> <thead> <tr> <th>Command</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>cd</td> <td>Changes the default directory or file system.</td> </tr> <tr> <td>dir</td> <td>Displays all files in a given file system.</td> </tr> </tbody> </table>	Command	Description	cd	Changes the default directory or file system.	dir	Displays all files in a given file system.
Command	Description						
cd	Changes the default directory or file system.						
dir	Displays all files in a given file system.						

format

Send documentation comments to mdsfeedback-doc@cisco.com.

format

To erase all the information on a module, use the **format** command.

```
format {bootflash: | slot0:}
```

Syntax Description This command has no arguments or keywords.

Defaults None.

Command Modes Exec.

Usage Guidelines None.

Examples

```
switch# format bootflash:  
switch#
```

Send documentation comments to mdsfeedback-doc@cisco.com.

fspf config

To configure an FSPF feature for the entire VSAN, and to enable or disable FSPF, use the **fspf config** command.

fspf config vsan *vsan-id* | enable vsan *vsan-id*

To delete FSPF configuration for the entire VSAN, and to enable or disable FSPF routing protocols, use the **no** form of the command.

Syntax Description	Description
fspf config	Enters the FSPF config mode.
vsan <i>vsan-id</i>	Enters FSPF global configuration mode for the specified VSAN or range of VSANs. If no VSAN ID is specified, the default VSAN is selected.
fspfenable vsan<i>vsan-id</i>	Enables fspf on the entire VSAN.
no fspf config vsan <i>vsan-id</i>	Deletes the FSPF configuration for specified VSAN.
no fspfenable vsan <i>vsan-id</i>	Disables FSPF routing protocol in the specified VSAN.
region <i>region-id</i>	To define the autonomous region to which the switch belongs. The backbone region has <i>region-id</i> =0. The parameter <i>region-id</i> is an unsigned integer value in the range 0-255.
spf hold-time <i>spf-holdtime</i>	To configure the time between two consecutive spf computations. If the time is small then routing will react faster to changes but CPU usage will be more. Default value for FSPF is 0. The parameter <i>spf-holdtime</i> is an integer (0-65535) specifying time in milliseconds.
min-ls-arrival <i>ls-arrival-time</i>	To configure the minimum time before a new link state update for a domain will be accepted by switch. Default value for FSPF is 1000 msec. The parameter <i>ls-arrival-time</i> is an integer (0-65535) specifying time in milliseconds.
min-ls-interval <i>ls-interval-time</i>	To configure the minimum time before a new link state update for a domain will be generated by the switch. Default value for FSPF is 5000 msec. The parameter <i>ls-interval-time</i> is an integer (0-65535) specifying time in milliseconds.

Defaults

In Configuration mode, the default is enabled.

In the FSPF submode, the default is **dynamic**.

Command Modes

Configuration mode, FSPF Configuration mode

Usage Guidelines

Can configure FSPF on VSANs globally.

For the commands issued in fspf configuration mode, you do not have to specify the VSAN number every time. This prevents configuration errors that might result from specifying the wrong VSAN number for these commands.

fspf config

Send documentation comments to mdsfeedback-doc@cisco.com.

Examples

```
switch## config t
switch(config)##
switch(config)# fspf config vsan 1
switch-config-(fspf-config)#
switch-config-(fspf-config)# exit
switch(config)##
switch(config)# no fspf config vsan 3
switch(config)#
switch(config)# no fspf enable vsan 5
switch(config)#
switch(config)# fspf enable vsan 7
switch(config)#
```

Related Commands

Command	Description
show fspf interface	Displays information for each selected interface.
fspf enable	
fspf cost	
fspf hello-interval	
fspf passive	
fspf retrasmit	