



Q 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 [“About the CLI Command Modes”](#) section on page 1-3 to determine the appropriate mode for each command.

qos class-map

To create and define a traffic class with match criteria that will be used to identify traffic, use the **qos class-map** command in configuration mode. To remove a previously-configured class, use the **no** form of the command.

```
qos class-map class [match-all | match-any]
```

```
no qos class-map class
```

Syntax Description	<i>class-name</i>	Specifies a class map name. Maximum length is 63 alphanumeric characters.
	match-all	(Optional) Specifies a logical AND operator for all matching statements in this class. (default).
	match-any	(Optional) Specifies a logical OR operator for all matching statements in this class.

Defaults	match-all
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Command Modes	Configuration mode.
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Command History	Release	Modification
	1.0(2)	This command was introduced.

Usage Guidelines	You can access this command only if you enable the QoS data traffic feature using the qos enable command.
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Examples	The following example shows how to create a QoS class map and enter class map configuration mode:
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```
switch# config terminal
switch(config)# qos class-map MyClass1
switch(config-cmap)#
```

Related Commands	Command	Description
	show qos	Displays configured QoS information.

qos control

To configure the QOS for control and data packets, use the **qos control** command. Use the **no** form of this command to disable this feature or revert to its factory defaults.

qos control *value* **data** *value*

no qos control *value* **data** *value*

Syntax Description	<i>value</i>	Applies the control DSCP value to all FCIP frames in the control TCP connection.
	data <i>value</i>	Applies the data DSCP value applies to all FCIP frames in the data TCP connection.

Defaults Enabled.

Command Modes Interface configuration mode.

Command History	Release	Modification
	1.1(1)	This command was introduced.

Usage Guidelines Use this command to cause FCIP to mark outbound packets with the DSCP values desired. This will allow the IP network to apply QOS policies appropriately.

Examples The following example configures the QOS for control and data packets:

```
switch# config terminal
switch(config)# interface fcip 2
switch(config-if)# qos control 1 data 62
switch(config-if)#
```

Related Commands	Command	Description
	show interface fcip	Displays the FCIP interface including QoS settings.

qos control priority

To enable the QoS priority assignment for control traffic feature on the Cisco MDS 9000 family of switches, use the **qos control** priority command in configuration mode. To revert to the factory default, use the **no** form of the command.

qos control priority 0

no qos priority control 0

Syntax Description	0	Specifies the lowest priority. To revert to the highest priority, use the no form of the command.			
Defaults	Enabled and priority 7 are the defaults.				
Command Modes	Configuration mode.				
Command History	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>1.0(2)</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	1.0(2)	This command was introduced.
Release	Modification				
1.0(2)	This command was introduced.				
Usage Guidelines	None.				
Examples	<p>The following example sets the QoS priority assignment to the highest level.</p> <pre>switch# config terminal switch(config)# no qos control priority 0</pre>				
Related Commands	<table border="1"> <thead> <tr> <th>Command</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>show qos</td> <td>Displays configured QoS information.</td> </tr> </tbody> </table>	Command	Description	show qos	Displays configured QoS information.
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show qos	Displays configured QoS information.				

qos dwrr-q

To associate a weight with a deficit weighted round robin (DWRR) scheduler queue, use the **qos dwrr-q** command in configuration mode. To remove a previously configured class, use the **no** form of the command.

```
qos dwrr-q {high | low | medium} weight value
```

```
no qos dwrr-q {high | low | medium} weight value
```

Syntax Description		
	high	Assigns the DWRR queue high option to DWRR queues.
	low	Assigns the DWRR queue low option to DWRR queues.
	medium	Assigns the DWRR queue medium option to DWRR queues.
	weight <i>value</i>	Specifies DWRR queue weight.

Defaults 10

Command Modes Configuration mode.

Command History	Release	Modification
	1.3(1)	This command was introduced.

Usage Guidelines You can access this command only if you enable the QoS data traffic feature using the **qos enable** command.

Examples The following example specifies the DWRR queue priority:

```
switch# config terminal
switch(config)# qos dwrr-q high weight 50
```

The following example reverts to the default value of 10:

```
switch(config)# no qos dwrr-q high weight 50
```

Related Commands	Command	Description
	show qos	Displays configured QoS information.

qos enable

To enable the QoS priority assignment for data traffic feature on the Cisco MDS 9000 family of switches, use the **qos enable** command in configuration mode. To disable the QoS priority assignment for control traffic feature, use the **no** form of the command.

qos enable

no qos enable

Syntax Description This command has no arguments or keywords.

Defaults Disabled.

Command Modes Configuration mode.

Command History	Release	Modification
	1.3(1)	This command was introduced.

Usage Guidelines None.

Examples The following example disables the QoS priority assignment feature:

```
switch# config terminal
switch(config)# qos enable
```

Related Commands	Command	Description
	show qos	Displays configured QoS information.

qos policy-map

To specify the class of service, use the **qos policy-map** command in configuration mode. To remove a previously configured class, use the **no** form of the command.

qos policy-map *policy-name*

no qos policy-map *policy-name*

Syntax Description	<i>policy-name</i>	Specifies a policy map name. Maximum length is 63 alphanumeric characters.
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Defaults	Disabled.
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Command Modes	Configuration mode.
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Command History	Release	Modification
	1.3(1)	This command was introduced.

Usage Guidelines	<p>You can access this command only if you enable the QoS data traffic feature using the qos enable command.</p> <p>As an alternative, you can map a class map to a Differentiated Services Code Point (DSCP). The DSCP is an indicator of the service level for a specified frame. The DSCP value ranges from 0 to 63. A dscp value of 46 is disallowed.</p>
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Examples	<p>The following example creates a policy map called MyPolicy and places you in the policy-map submode:</p> <pre>switch(config)# qos policy-map MyPolicy switch(config-pmap)#</pre>
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Related Commands	Command	Description
	qos enable	Enables the QoS data traffic feature on the switch.
	show qos	Displays configured QoS information.

qos priority

To configure the quality of server (QoS) priority attribute in a zone attribute group, use the **qos priority** command in zone attribute configuration submode. To revert to the default, use the **no** form of the command.

qos priority {high | low | medium}

no qos priority {high | low | medium}

Syntax Description	high	Specifies high priority.
	low	Specifies low priority.
	medium	Specifies medium priority.

Defaults Low.

Command Modes Zone attribute configuration submode.

Command History	Release	Modification
	2.0(x)	This command was introduced.

Usage Guidelines None.

Examples The following example shows how to set the QoS priority attribute for a zone attribute group:

```
switch# config terminal
switch(config)# zone-attribute-group name admin-attributes vsan 10
switch(config-attribute-group)# qos priority medium
```

Related Commands	Command	Description
	show zone-attribute-group	Displays zone attribute group information.
	zone-attribute-group name	Configures zone attribute groups.

qos service

To apply a service policy, use the **qos service** command in configuration mode. To remove a previously configured class, use the **no** form of the command.

```
qos service policy policy-name vsan vsan-id
```

```
no qos service policy policy-name vsan vsan-id
```

Syntax Description	Policy Name	Description
policy <i>policy-name</i>	<i>policy-name</i>	Associates a policy map with the VSAN.
vsan <i>vsan-id</i>	<i>vsan-id</i>	Specifies the VSAN ID. The range is 1 to 4093.

Defaults None.

Command Modes Configuration mode.

Command History	Release	Modification
	1.3(1)	This command was introduced.

Usage Guidelines You can access this command only if you enable the QoS data traffic feature using the **qos enable** command.

Examples The following example applies a configured policy to VSAN 3:

```
switch(config)# qos service policy MyPolicy vsan 3
Operation in progress. Please check policy-map parameters
```

The following example deletes a configured policy that was applied to VSAN 7:

```
switch(config)# no qos service policy OldPolicy vsan 7
Operation in progress. Please check policy-map parameters
```

Related Commands	Command	Description
	show qos	Displays configured QoS information.

quiesce

To gracefully shut down an ISL in a PortChannel, use the **quiesce** command in configuration mode. To disable this feature, use the **no** form of the command.

quiesce interface fc slot/port

no quiesce interface fc slot/port

Syntax Description	interface fc slot/port Specifies the interface to be quiesced.
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Defaults	None.
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Command Modes	EXEC mode.
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Command History	Release	Modification
	1.3(1)	This command was introduced.
	2.0(2b)	This command was deprecated and the functionality integrated into the shutdown command.

Usage Guidelines	<p>The following conditions return an error:</p> <ul style="list-style-type: none"> • The interface is not part of PortChannel. • The interface is not up. • The interface is the last operational interface in the PortChannel:
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Examples	<p>The following example gracefully shuts down the one end of the ISL link in a PortChannel:</p> <pre>switchA# quiesce interface fc 2/1 WARNING: this command will stop forwarding frames to the specified interfaces. It is intended to be used to gracefully shutdown interfaces in a port-channel. The procedure is: 1. quiesce the interfaces on both switches. 2. shutdown the interfaces administratively. Do you want to continue? (y/n) [n] y</pre>
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Related Commands	Command	Description
	show interface	Displays interface configuration and status information.