

# Q Commands


- qos class-map, on page 2
- qos control, on page 3
- qos control priority, on page 4
- qos dwrr-q, on page 5
- qos enable, on page 6
- qos policy-map, on page 7
- qos priority, on page 8
- qos service, on page 9
- quiesce, on page 10

# 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

| | |
|---|---|
| *class-name* | 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. |

## Command Default

match-all

## Command Modes

Configuration mode.

## 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.

## Examples

The following example shows how to create a QoS class map and enter class map configuration mode:

```
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

| | |
|---|---|
| *value* | Applies the control DSCP value to all FCIP frames in the control TCP connection. |
| **data** *value* | Applies the data DSCP value applies to all FCIP frames in the data TCP connection. |

## Command Default

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. |

## Command Default

Enabled and priority 7 are the defaults.

## Command Modes

Configuration mode.

## Command History

| Release | Modification |
|---|---|
| 1.0(2) | This command was introduced. |

## Usage Guidelines

None.

## Examples

The following example sets the QoS priority assignment to the highest level.

```
switch# config terminal
switch(config)# no qos control priority 0
```

## Related Commands

| Command | Description |
|---|---|
| **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** *value* | Specifies DWRR queue weight. |

## Command Default

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.

## Command Default

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

| | |
|---|---|
| *policy-name* | Specifies a policy map name. Maximum length is 63 alphanumeric characters. |

## Command Default

Disabled.

## 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.

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.

## Examples

The following example creates a policy map called MyPolicy and places you in the policy-map submode:

```
switch(config)# qos policy-map MyPolicy
switch(config-pmap)#
```

## 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** commandn **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. |

## Command Default

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***policy-name* | Associates a policy map with the VSAN. |
| **vsan** *vsan-id* | Specifies the VSAN ID. The range is 1 to 4093. |

## Command Default

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 queisce interface fc** *slot / port*

## Syntax Description

| | |
|---|---|
| **interface fc** *slot/port* | Specifies the interface to be quiesced. |

## Command Default

None.

## Command Modes

EXEC mode.

## 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

The following conditions return an error:

- The interface is not part of PortChannel.
- The interface is not up.
- The interface is the last operational interface in the PortChannel:

## Examples

The following example gracefully shuts down the one end of the ISL link in a PortChannel:

```
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
```

## Related Commands

| Command | Description |
|---|---|
| **show interface** | Displays interface configuration and status information. |