

Legacy QoS Command Deprecation

The functionality provided by these hidden commands has been replaced by similar functionality provided via the modular QoS CLI (MQC). The MQC is a set of a platform-independent commands for configuring QoS on Cisco platforms. This means that you must now provision QoS by defining traffic classes, creating traffic policies containing those classes, and attaching those policies to the desired interfaces. This document lists the hidden commands and their replacement MQC commands.

- Information About Legacy QoS Command Deprecation, on page 1
- Additional References, on page 11
- Feature Information for Legacy QoS Command Deprecation, on page 12

Information About Legacy QoS Command Deprecation

QoS Features Applied Using the MQC

The MQC structure lets you define a traffic class (also called a class map), create a traffic policy (also called a policy-map), and attach the traffic policy to an interface. This comprises the following three high-level steps.

1. Define a traffic class by using the **class-map** command. A traffic class is used to classify traffic.
2. Create a traffic policy by using the **policy-map** command. A traffic policy contains a traffic class and one or more QoS features that will be applied to the traffic class. The QoS features in the traffic policy determine how to treat the classified traffic.
3. Attach the traffic policy to the interface by using the **service-policy** command.

Steps 1 and 3 do not involve legacy QoS hidden commands, which means that they are not within the scope of this document. For more information about these two steps, see the " Applying QoS Features Using the MQC " module in the *Quality of Service Solutions Configuration Guide* .

Legacy Commands Being Hidden

The table below lists the commands that have been hidden or removed. The table also lists their replacement commands (or sequence of commands).

Table 1: Map of Hidden, Removed or Unsupported Commands to Their Replacement Commands

Hidden, Removed or Unsupported Commands	Replacement MQC Command Sequence
Configuring Weighted Random Early Detection or Distributed Weighted Random Early Detection Parameter Groups	

Commands
• random-detect-group
• random-detect (per VC)
Note
This command is not supported in Cisco IOS Release 15.0(1)S.
Command Usage
`Router(config)# random-detect-group group-name [dscp-based|prec-based]`
`Router(config)# interface atm type number`
`Router(config-if)# pvc [name] vpi/vci`
`Router(config-if-atm-vc)# random-detect [attach group-name ]`
	Command Usage
	None (this functionality no longer exists).

Configuring Weighted Random Early Detection	

Hidden, Removed or Unsupported Commands	Replacement MQC Command Sequence

Commands
• random-detect
• random-detect dscp
• random-detect (dscp-based keyword)
• random-detect flow
• random-detect exponential-weighting-constant
• random-detect (prec-based keyword)
• random-detect precedence
Command Usage
`Router(config)# interface type number`
`Router(config-if)# random-detect [number]`
`Router(config-if)# random-detect exponential-weighting-constant exponent`
`Router(config-if)# random-detect flow`
`Router(config-if)# random-detect precedence {precedence|rsvp} min-threshold max-threshold max-probability-denominator`
`Router(config-if)# random-detect prec-based`
`Router(config-if)# random-detect dscp-based`
`Router(config-if)# random-detect dscp dscp-value min-threshold max-threshold[max-probability-denominator]`
	Command Usage
	`Router(config)# policy-map`
	`policy-map-name`
	`Router(config-pmap)# class class-default`
	`Router(config-pmap-c)# random-detect dscp dscp-value min-threshold max-threshold[ mark-probability-denominator]`
	`Router(config-pmap-c)# random-detect clp clp-value min-threshold max-threshold[mark-probability-denominator]`
	`Router(config-pmap-c)# random-detect cos cos-value min-threshold max-threshold[mark-probability-denominator]`
	`Router(config-pmap-c)# random-detect discard-class discard-class-value min-threshold max-threshold[ mark-probability-denominator]`
	`Router(config-pmap-c)# random-detectprecedence ip-precedence min-threshold max-threshold[mark-probability-denominator]`
	`Router(config-pmap-c)# random-detect precedence-based`
	`Router(config-pmap-c)# random-detect ecn`
	`Router(config-pmap-c)# random-detect exponential-weighting-constant exponent`
	`Router(config-pmap-c)# random-detect cos-based`
	`Router(config-pmap-c)# random-detect dscp-based`

Commands
• random-detect flow
• random-detect flow average-depth-factor
• random-detect flow count
Command Usage
`Router(config)# interface type number`
`Router(config-if)# random-detect [number]`
`Router(config-if)# random-detect flow`
`Router(config-if)# random-detect flow count number`
`Router(config-if)# random-detect flow average-depth-factor scaling-factor`
	Command Usage
	None (this functionality no longer exists).

Configuring Bandwidth Allocation	

Hidden, Removed or Unsupported Commands	Replacement MQC Command Sequence

Commands
• max-reserved-bandwidth
Command Usage
`Router(config)# interface type number`
`Router(config-if)# max-reserved-bandwidth percentage`
	Command Usage
	`Router(config)# policy-map policy-map-name`
	`Router(config-pmap)# class class-default`
	`Router(config-pmap-c)# bandwidth{bandwidth-in-kbps |remaining percent percentage | percent percentage}`

Configuring Custom Queueing	

Commands
• custom-queue-list
Note
This command is not supported in Cisco IOS Release 15.0(1)S.
Command Usage
`Router(config)# interface type number`
`Router(config-if)#`
`custom-queue-list[list-number]`
	Command Usage
	`Router(config)# policy-map policy-map-name`
	`Router(config-pmap)# class class-default`
	`Router(config-pmap-c)# bandwidth{ bandwidth-in-kbps |remaining percent percentage |percent percentage}`

Configuring Priority Queueing	

Commands
• ip rtp priority
• ip rtp reserve
Command Usage
`Router(config)# interface type number`
`Router(config-if)# ip rtp priority starting-port-number port-range bandwidth`
`Router(config)# interface type number`
`Router(config-if)# ip rtp reserve lowest-udp-port range-of-ports [maximum-bandwidth] 1000`
	Command Usage
	`Router(config)# policy-map policy-map-name`
	`Router(config-pmap)# class class-name`
	`Router(config-pmap-c)# priority`

Configuring Weighted Fair Queueing	

Hidden, Removed or Unsupported Commands	Replacement MQC Command Sequence

Commands
• fair-queue (WFQ)
Command Usage (Cisco IOS Release 15.0(1)S)
`Router(config)# interface type number`
`Router(config-if)# fair-queue`
Command Usage (Cisco IOS Release 15.1(3)T)
`Router(config)# interfacetype number`
`Router(config-if)# fair-queue [congestive-discard-threshold [dynamic-queue-count [reserved-queue-count]]]`
	Command Usage (Cisco IOS Release 15.0(1)S)
	`Router(config)# policy-map policy-map-name`
	`Router(config-pmap)# class class-default`
	`Router(config-pmap-c)# fair-queue`
	Command Usage (Cisco IOS Release 15.1(3)T)
	`Router(config)# policy-map policy-map-name`
	`Router(config-pmap)# class class-default`
	`Router(config-pmap-c)# fair-queue[dynamic-queues ]`

Assigning a Priority Group to an Interface	

Commands
• priority-group
Note
This command is not supported in Cisco IOS Release 15.0(1)S.
Command Usage
`Router(config)# interface type number`
`Router(config-if)# priority-group list-number`
	Command Usage
	`Router(config)# policy-map policy-map-name`
	`Router(config-pmap)# class class-default`
	`Router(config-pmap-c)# priority`
	`Router(config-pmap-c)# priority bandwidth-in-kbps [burst-in-bytes]`
	`Router(config-pmap-c)# priority percent percent [burst-in-bytes]`
	`Router(config-pmap-c)# priority level level`
	`Router(config-pmap-c)# priority level level [bandwidth-in-kbps [burst-in-bytes]]`
	`Router(config-pmap-c)# priority level level[percent percent [burst-in-bytes]]`

Configuring the Threshold for Discarding DE Packets from a Switched PVC Traffic Shaping Queue	

Commands
• frame-relay congestion threshold de
Command Usage
`Router(config)# map-class frame-relay map-class-name`
`Router(config-map-class)# frame-relay congestion threshold de percentage`
	Command Usage
	`Router(config)# policy-map policy-map-name1`
	`Router(config-pmap)# class class-default`
	`Router(config-pmap-c)# random-detect discard-class-based`
	`Router(config-pmap-c)# random-detect discard-class discard-class min-threshold max-threshold`
	`Router(config-pmap-c)# exit`
	`Router(config-pmap)# exit`
	`Router(config)# policy-map shape`
	`Router(config-pmap)# class class-default`
	`Router(config-pmap-c)# shape average rate`
	`Router(config-pmap-c)# service-policy policy-map-name1`
	`Router(config-pmap-c)# exit`
	`Router(config-pmap)# exit`
	`Router(config)# policy-map policy-map-name2`
	`Router(config-pmap)# class class-name`
	`Router(config-pmap-c)# set discard-classdiscard-class`

Hidden, Removed or Unsupported Commands	Replacement MQC Command Sequence
Configuring Frame Relay Custom Queueing for Virtual Circuits	

Commands
• frame-relay custom-queue-list
Command Usage
`Router(config)# map-class frame-relay map-class-name`
`Router(config-map-class)# frame-relay custom-queue-list list-number`
	Command Usage
	`Router(config)# policy-map policy-map-name`
	`Router(config-pmap)# class class-default`
	`Router(config-pmap-c)# bandwidth{bandwidth-in-kbps | remaining percent percentage | percentpercentage}`

Configuring Frame Relay ECN Bits Threshold	

Commands
• frame-relay congestion threshold ecn
Command Usage
`Router(config)# map-class frame-relay map-class-name`
`Router(config-map-class)# frame-relay congestion threshold ecn percentage`
	Command Usage
	None (this functionality no longer exists).
	The closest equivalent is MQC traffic shaping (not based on ECN).
	`Router(config)# policy-map policy-map-name`
	`Router(config-pmap)# class class-default`
	`Router(config-pmap-c)# shape average rate`

Configuring Frame Relay Weighted Fair Queueing	

Commands
• frame-relay fair-queue
Command Usage
`Router(config)# map-class frame-relay map-class-name`
`Router(config-map-class)# frame-relay fair-queue [discard-threshold [dynamic-queue-count[reserved-queue-count [buffer-limit]]]]`
	Command Usage
	`Router(config)# policy-map policy-map-name`
	`Router(config-pmap)# class class-default`
	`Router(config-pmap-c)# fair-queue`
	`Router(config-pmap-c)# fair-queue queue-limit packets`
	Note
	The **queue-limit** *packets* keyword and argument pair is not supported in Cisco IOS Release 15.1(3)T.

Configuring Frame Relay Priority Queueing on a PVC	

Commands
• frame-relay ip rtp priority
Command Usage
`Router(config)# map-class frame-relay map-class-name`
`Router(config-map-class)# frame-relay ip rtp priority starting-port-number port-range bandwidth`
	Command Usage
	`Router(config)# policy-map policy-map-name`
	`Router(config-pmap)# class class-name`
	`Router(config-pmap-c)# priority bandwidth-in-kbps [burst-in-bytes]`

Hidden, Removed or Unsupported Commands	Replacement MQC Command Sequence
Assigning a Priority Queue to Virtual Circuits Associated with a Map Class	

Commands
• frame-relay priority-group
Command Usage
`Router(config)# map-class frame-relay map-class-name`
`Router(config-map-class)# frame-relay priority-group group-number`
	Command Usage
	`Router(config)# policy-map policy-map-name`
	`Router(config-pmap)# class class-default`
	`Router(config-pmap-c)# priority`
	`Router(config-pmap-c)# priority bandwidth-in-kbps [burst-in-bytes]`
	`Router(config-pmap-c)# priority percent percentage [burst-in-bytes]`
	`Router(config-pmap-c)# priority level level [percent percentage [burst-in-bytes]]`
	Note
	The **priority level**command is not supported in Cisco IOS Release 15.1(3)T.

Configuring the Frame Relay Rate Adjustment to BECN	

Commands
• frame-relay adaptive-shaping (becn keyword)
Command Usage
`Router(config)# map-class frame-relay map-class-name`
`Router(config-map-class)# frame-relay adaptive-shaping becn`
	Command Usage
	None (this functionality no longer exists). The closest equivalent is MQC traffic shaping (not based on BECN).
	`Router(config)# policy-map policy-map-name`
	`Router(config-pmap)# class class-default`
	`Router(config-pmap-c)# shape adaptive rate`

Configuring the Frame Relay Rate Adjustment to ForeSight Messages	

Commands
• frame-relay adaptive-shaping (foresight keyword)
Command Usage
`Router(config)# map-class frame-relay map-class-name`
`Router(config)# frame-relay adaptive-shaping foresight`
	Command Usage
	None (this functionality no longer exists).

Enabling Frame Relay Traffic-Shaping FECNs as BECNs	

Hidden, Removed or Unsupported Commands	Replacement MQC Command Sequence

Commands
• frame-relay fecn-adapt
Command Usage
`Router(config)# map-class frame-relay map-class-name`
`Router(config-map-class)#frame-relay fecn-adapt`
	Command Usage
	None (this functionality no longer exists). The closest equivalent is MQC traffic shaping (not based on FECN/BECN).
	`Router(config)# policy-map policy-map-name`
	`Router(config-pmap)# class class-default`
	`Router(config-pmap-c)# shape average rate`

Configuring the Frame Relay Enhanced Local Management Interface	

Commands
• frame-relay qos-autosense
Note
This command has not been hidden in Cisco IOS Release 15.0(1)S.
Command Usage
`Router(config)# interface type number`
`Router(config-if)#no ip address`
`Router(config-if)# encapsulation frame-relay`
`Router(config-if)# frame-relay lmi-typeansi`
`Router(config-if)# frame-relay traffic-shaping`
`Router(config-if)# frame-relay qos-autosense`
	Command Usage
	None (this functionality no longer exists).

Configuring Frame Relay Minimum Committed Information Rate (MINCIR)	
Commands • frame-relay mincir **Command Usage** `Router(config)# frame-relay mincir {in | out} bps`	**Command Usage** None (this functionality no longer exists).
Configuring Frame Relay Priority to a permanent virtual circuit (PVC)	

Hidden, Removed or Unsupported Commands	Replacement MQC Command Sequence

Commands
• frame-relay interface-queue
Command Usage
`Router(config)# interface type number`
`Router(config-if)#no ip address`
`Router(config-if)# frame-relay interface-queue priority 10 20 30 40`
	Command Usage
	`Router(config)# policy-map policy-map-name`
	`Router(config-pmap)# class class-default`
	`Router(config-pmap-c)# priority`
	`Router(config-pmap)# class class-default`
	`Router(config-pmap-c)# priority`

Configuring Frame Relay Traffic Shaping	

Commands
• frame-relay bc
• frame-relay be
• frame-relay cir
Note
In Cisco IOS Release 15.1(3)T, these commands are not hidden, but they are valid only for SVCs (not PVCs).
Command Usage
`Router(config)# map-class frame-relay map-class-name`
`Router(config-map-class)# frame-relay bc {in | out} committed-burst-size-in-bits`
`Router(config-map-class)# frame-relay be {in | out} excess-burst-size-in-bits`
`Router(config-map-class)# frame-relay cir {in | out} bits-per-second`
	Command Usage
	`Router(config)# policy-map policy-map-name`
	`Router(config-pmap)# class class-default`
	`Router(config-pmap-c)# shape average rate`

Configuring Frame Relay Traffic Shaping on a VC	

Commands
• frame-relay traffic-rate
Command Usage
`Router(config)# map-class frame-relay map-class-name`
`Router(config-map-class)# traffic-rate average [peak]`
	Command Usage
	`Router(config)# policy-map policy-map-name`
	`Router(config-pmap)# class class-default`
	`Router(config-pmap-c)# shape average rate`
	`Router(config-pmap-c)# service-policy output traffic-rate` service-policy output traffic-rate

Displaying the Contents of Packets Inside a Queue for an Interface or VC	

Hidden, Removed or Unsupported Commands	Replacement MQC Command Sequence
Commands • show queue **Command Usage** `Router# show queue interface`	**Command Usage** `Router# show policy-map interface`
Displaying Queueing Strategies	
Commands • show queueing **Command Usage** `Router# show queueing`	**Command Usage** `Router# show policy-map interface`
Displaying Weighted Random Early Detection (WRED) Information	
Commands • show interfaces random-detect **Command Usage** `Router# show interfaces [type number] random-detect`	**Command Usage** `Router# show policy-map interface`
Displaying WRED Parameter Groups	
Commands • show random-detect-group **Command Usage** `Router# show random-detect-group`	**Command Usage** `Router# show policy-map interface`
Displaying the Traffic-Shaping Configuration, Queueing, and Statistics	

Hidden, Removed or Unsupported Commands	Replacement MQC Command Sequence

Commands
• show traffic-shape
• show traffic-shape queue
• show traffic-shape statistics
Command Usage
`Router# show traffic-shape [interface-type interface-number]`
`Router# show traffic-shape queue [interface-number [dlci dlci-number]]`
`Router# show traffic-shape statistics [interface-type interface-number]`
	Command Usage
	`Router# show policy-map interface`

Displaying Weighted Fair Queueing Information	
Commands • show interfaces fair-queue **Command Usage** `Router# show interfaces [interface-type interface-number] fair-queue`	**Command Usage** `Router# show policy-map interface`

Additional References

Related Documents

Related Topic	Document Title
Cisco IOS commands	Cisco IOS Master Commands List, All Releases
Defining traffic classes; attaching traffic policies to interfaces	" Applying QoS Features Using the MQC " module in the *Quality of Service Solutions Configuration Guide*
Reference pages for QoS commands	*Cisco IOS Quality of Service Solutions Command Reference*
Reference pages for wide-area networking commands	*Cisco IOS Wide-Area Networking Command Reference*

Technical Assistance

Description	Link
The Cisco Support and Documentation website provides online resources to download documentation, software, and tools. Use these resources to install and configure the software and to troubleshoot and resolve technical issues with Cisco products and technologies. Access to most tools on the Cisco Support and Documentation website requires a Cisco.com user ID and password.	http://www.cisco.com/cisco/web/support/index.html

Feature Information for Legacy QoS Command Deprecation

The following table provides release information about the feature or features described in this module. This table lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to https://cfnng.cisco.com/. An account on Cisco.com is not required.

Table 2: Feature Information for Legacy QoS Command Deprecation

Feature Name	Releases	Feature Information
Legacy QoS Command Deprecation: Hidden Commands	15.0(1)S 15.1(3)T	To streamline Cisco IOS QoS, certain commands have been hidden, which means that if you try to view a hidden command by entering a question mark (**?**) at the command line, the command does not appear. However, if you know the command syntax, you can enter it. These commands will be removed in a future release. The functionality provided by these hidden commands is replaced by similar functionality from the modular QoS CLI (MQC), which is a set of a platform-independent commands for configuring QoS. The following commands were modified: **custom-queue-list**, **fair-queue (WFQ)**, **frame-relay adaptive-shaping** (**becn** keyword), **frame-relay adaptive-shaping** (**foresight** keyword), **frame-relay bc**, **frame-relay be**, **frame-relay cir**, **frame-relay congestion threshold de**, **frame-relay congestion threshold ecn**, **frame-relay custom-queue-list**, **frame-relay fair-queue**, **frame-relay fecn-adapt**, **frame-relay ip rtp priority**, **frame-relay priority-group**, **frame-relay qos-autosense**, **ip rtp priority**, **max-reserved-bandwidth**, **priority-group**, **random-detect**, **random-detect dscp**, **random-detect**(**dscp-based** keyword), **random-detect exponential-weighting-constant**, **random-detect flow**, **random-detect flow average-depth-factor**, **random-detect flow count**, **random-detect**(**prec-based** keyword), **random-detect precedence**, **random-detect-group**, **show interfaces fair-queue**, **show interfaces random-detect**, **show queue**, **show queueing**, **show random-detect-group**, **show traffic-shape**, **show traffic-shape queue**, **show traffic-shape statistics**.

Feature Name	Releases	Feature Information
Legacy QoS Command Deprecation: Hidden Commands	Cisco IOS XE Release 2.6	To streamline Cisco IOS XE QoS, certain commands have been hidden, which means that if you try to view a hidden command by entering a question mark (**?**) at the command line, the command does not appear. However, if you know the command syntax, you can enter it. These commands will be removed in a future release. The functionality provided by these hidden commands is replaced by similar functionality from the modular QoS CLI (MQC), which is a set of a platform-independent commands for configuring QoS. The following commands were modified: **custom-queue-list**, **fair-queue (WFQ)**, **frame-relay adaptive-shaping** (**becn** keyword), **frame-relay adaptive-shaping** (**foresight** keyword), **frame-relay bc**, **frame-relay be**, **frame-relay cir**, **frame-relay congestion threshold de**, **frame-relay congestion threshold ecn**, **frame-relay custom-queue-list**, **frame-relay fair-queue**, **frame-relay fecn-adapt**, **frame-relay ip rtp priority**, **frame-relay priority-group**, **frame-relay qos-autosense**, **ip rtp priority**, **max-reserved-bandwidth**, **show interfaces fair-queue**, **show interfaces random-detect**, **show queue**, **show queueing**, **show traffic-shape**, **show traffic-shape queue**, **show traffic-shape statistics**.
Legacy QoS Command Deprecation: Removed Commands	Cisco IOS XE Release 3.2S	The legacy QoS commands were removed. This means that you must use the appropriate replacement MQC commands. The following commands were removed: **custom-queue-list**, **fair-queue (WFQ)**, **frame-relay adaptive-shaping** (**becn** keyword), **frame-relay adaptive-shaping** (**foresight** keyword), **frame-relay bc**, **frame-relay be**, **frame-relay cir**, **frame-relay congestion threshold de**, **frame-relay congestion threshold ecn**, **frame-relay custom-queue-list**, **frame-relay fair-queue**, **frame-relay fecn-adapt**, **frame-relay ip rtp priority**, **frame-relay priority-group**, **frame-relay qos-autosense**, **ip rtp priority**, **max-reserved-bandwidth**, **show interfaces fair-queue**, **show interfaces random-detect**, **show queue**, **show queueing**, **show traffic-shape**, **show traffic-shape queue**, **show traffic-shape statistics**.