



H Commands

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hardware pq-drain

To configure the proxy-queue drain rate settings, use the `hardware pq-drain` command in global configuration mode. To disable proxy-queue drain settings, use the `no` form of this command.

```
hardware pq-drain 10g 10g-drain-rate 40g 40g-drain-rate
no hardware pq-drain
```

Syntax Description

10g 10g-drain-rate	Proxy Queue drain rate for the 10 G interface. The range is from 1 Mbps to 20000 Mbps.
40g 40g-drain-rate	Proxy Queue drain rate for the 10 G interface. The range is from 1 Mbps to 80000 Mbps.

Command Default

Disabled

Command Modes

Global configuration mode

Command History

Release	Modification
7.0(0)N1(1)	This command was introduced.

Usage Guidelines



Note

This command is applicable to only Cisco Nexus 6000 switches.

When the proxy queue reaches a threshold that indicates congestion, Explicit Congestion Notification (ECN) marking is performed so that the receiver of the packet echoes the congestion indication to the sender. The proxy-queue drain rate is configured to ensure that during congestion at egress ports only a certain amount of packets are drained.

Examples

This example shows how to configure proxy-queue settings to drain 9900 Mbps of traffic from 10 Gigabit interfaces and 39900 Mbps of traffic from 40 Gigabit interfaces:

```
switch(config)# hardware pq-drain 10g 9900 40g 39900
```

Related Commands

Command	Description
hardware random-detect	Configures ECN for a QoS group.

hardware random-detect

To configure Explicit Congestion Notification (ECN) for a Quality of Service (QoS) group, use the hardware random-detect command in global configuration mode. To disable ECN, use the no form of this command.

```
hardware random-detect min-thresh 10g 10g-min-threshold 40g 40g-min-threshold max-thresh 10g
10g-max-threshold 40g 40g-max-threshold ecn qos-group group-number
no hardware random-detect
```

Syntax Description

min-thresh	Minimum threshold.
10g 10g-min-threshold	Minimum threshold for 10 Gigabit interfaces. The range is from 1 to 67108863 bytes.
40g 40g-min-threshold	Minimum threshold for 40 Gigabit interfaces. The range is from 1 to 67108863 bytes.
max-thresh	Maximum threshold.
10g 10g-max-threshold	Maximum threshold for 10 Gigabit interfaces. The range is from 1 to 67108863 bytes.
40g 40g-max-threshold	Maximum threshold for 40 Gigabit interfaces. The range is from 1 to 67108863 bytes.
ecn	Enables ECN for the specified QoS group.
qos-group group-number	Specifies the QoS group that is being configured.

Command Default

Disabled

Command Modes

Global configuration mode

Command History

Release	Modification
7.0(0)N1(1)	This command was introduced.

Usage Guidelines



Note

This command is applicable to only Cisco Nexus 6000 switches.

To implement Weighted Random Early Detection (WRED) Explicit Congestion Notification (ECN) on proxy queues you use the hardware random-detect command to configure minimum and maximum threshold values per QoS group. Then you use the hardware pq-drain command to configure the proxy-queue drain rate.

Examples

This example shows how to enable ECN threshold values for the class-default QoS group:

```
switch(config)# hardware random-detect min-thresh 10g 64000 40g 4000 max-thresh 10g 128000  
40g 246000 ecn qos-group 0
```

Related Commands

Command	Description
hardware pq-drain	Configures proxy queue drain rate.