B Commands

This chapter describes the Cisco NX-OS quality of service (QoS) commands that begin with B.

bandwidth (QoS)

To allocate a minimum percentage of the interface bandwidth to a queue and configure the bandwidth on both ingress and egress queues, use the **bandwidth** command. To remove a bandwidth configuration, use the **no** form of this command.

bandwidth percent *percent*

no bandwidth percent *percent*

Syntax Description

percent	Specifies the percentage of bandwidth of the underlying link rate.
percent	Percent value. The range is from 0 to 100.

Command Default

Default bandwidth rate is kbps.

Command Modes

Policy map type queuing class configuration

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Examples

This example shows how to set the bandwidth for the specified queue:

```
switch(config)# policy-map type queuing my_policy1
switch(config-pmap-que)# class type queuing 1p7q4t-out-pq1
switch(config-pmap-c-que)# bandwidth percent 25
switch(config-pmap-c-que)#
```

This example shows how to remove the bandwidth for the specified queue:

```
switch(config)# policy-map type queuing my_policy1
switch(config-pmap-que)# class type queuing 1p7q4t-out-pq1
switch(config-pmap-c-que)# no bandwidth percent 25
switch(config-pmap-c-que)#
```

Related Commands

Command	Description
show class-map	Displays class maps.
show policy-map	Displays policy maps.

burst maximum

To configure the maximum number of bursts allowed within a time interval before generating an interrupt, use the **burst maximum** command. To remove the micro-burst maximum configuration, use the **no** form of this command.

burst maximum {ingress | egress} burst-count *max-burst*

no burst maximum

Syntax Description

ingress	Specifies that the configuration applies to ingress ports only.
egress	Specifies that the configuration applies to egress ports only.
burst-count *max-burst*	The maximum number of bursts allowed before the system generates an interrupt. The range is from 1 to 4194303.

Command Default

An interrupt is generated when a micro-burst is detected.

Command Modes

Interface configuration (config-if)

Command History

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

Usage Guidelines

By default, the system generates an interrupt as soon as it detects a micro-burst. However, you can use the **burst maximum** command to define a maximum number of bursts that can occur before the system generates an interrupt.

You use this command to configure the maximum number of bursts allowed with a time interval before the system generates an interrupt on a port in the ingress and egress directions. The time interval is calculated as ten times the micro-burst threshold interval (in seconds).

Examples

This example shows how to configure micro-burst thresholds for the ingress ports on an interface:

```
switch(config)# interface ethernet 1/1
switch(config-if)# burst threshold ingress limit 60 interval 10000000
sswitch(config-if)# #
```

This example shows how to remove the microburst configuration for ingress ports on the specified interface:

```
switch(config)# interface ethernet 1/1
switch(config-if)# no burst threshold ingress
switch(config-if)#
```

Related Commands

Command	Description
burst threshold	Configures micro-burst threshold values for an interface.
clear burst-counters	Clears burst counter values.
show interface burst-counters	Displays burst counter information.

burst threshold

To configure micro-burst threshold values for an interface, on both ingress and egress ports, use the **burst threshold** command. To remove micro-burst threshold configuration, use the **no** form of this command.

burst threshold {ingress | egress} {limit *percent* **| size** *max_bytes***} interval** *interval_time*

no burst threshold {ingress | egress}

Syntax Description

ingress	Specifies that the configuration applies to ingress ports only.
egress	Specifies that the configuration applies to egress ports only.
limit *percent*	Sets the burst threshold to a percentage of the link speed. The range is from 1 to 100.
size *max_bytes*	Sets the burst threshold to a maximun number of bytes. The range is from 1 to 68719476735 bytes.
interval *interval_time*	Sets the micro-burst monitoring time interval in micro seconds. The range is from 1 to 16777215.

Command Default

Burst threshold is not configured.

Command Modes

Interface configuration (config-if)

Command History

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

Usage Guidelines

Use this command to enable micro-burst detection on a port. If activity occurs on the port that meets the specified criteria, it is identified as a micro-burst and the appropriate burst counters are incremented.

Examples

This example shows how to configure micro-burst thresholds for the ingress ports on an interface:

```
switch(config)# interface ethernet 1/1
switch(config-if)# burst threshold ingress limit 60 interval 10000000
sswitch(config-if)# #
```

This example shows how to remove the microburst configuration for ingress ports on the specified interface:

```
switch(config)# interface ethernet 1/1
switch(config-if)# no burst threshold ingress
switch(config-if)#
```

Related Commands

Command	Description
burst maximum	Configures the maximum number of bursts allowed within a time interval before generating an interrupt.
clear burst-counters	Clears burst counter values.
show interface burst-counters	Displays burst counter information.