

Egress Shaping per Queue on 200/300 Series Managed Switches

Objective

A queue is used to store traffic until the switch is free to process it. Each port/LAG on the switch has four ingress (input) queues and four egress (output) queues. The egress rate is the rate in which packets are sent out from the switch. An egress rate limit can be performed on a per-queue per-port basis. This means that the egress rate can be limited for each specific queue on every port on the switch. Egress shaping is a form of an egress rate limit.

Egress shaping is useful for when a destination expects a smooth flow of data as opposed to irregular bursts of data. The switch can limit all frames except for management frames.

This article explains how to configure egress shaping per queue on 200/300 series switches.

Applicable Devices

- SF/SG 200 and SF/SG 300 Series Managed Switches

Software Version

- 1.3.0.62

Configure Egress Shaping per Queue

Step 1. Log in to the web configuration utility and choose **Quality of Service > General > Egress Shaping per Queue**. The *Egress Shaping Per Queue* page opens:

Step 2. From the Interface Type drop-down list, choose **Port** to have a list of ports displayed or choose **LAG** to have a list of link aggregations displayed and click **Go**.

Step 4. Click the radio button of the Port/LAG that you wish to edit.

Step 5. Click **Edit** to edit the parameters. The *Edit Egress Shaping Per Queue* window appears:

Interface:

☒ Port
GE18
☐ LAG
1

Queue 1:
☒ Enable

Committed Information Rate (CIR):
1000
(Range: 64 - 1000000)

Committed Burst Size (CBS):
10000
(Range: 4096 - 16762902)

Queue 2:
☒ Enable

Committed Information Rate (CIR):
2000
(Range: 64 - 1000000)

Committed Burst Size (CBS):
20000
(Range: 4096 - 16762902)

Queue 3:
☒ Enable

Committed Information Rate (CIR):
3000
(Range: 64 - 1000000)

Committed Burst Size (CBS):
30000
(Range: 4096 - 16762902)

Queue 4:
☒ Enable

Committed Information Rate (CIR):
4000
(Range: 64 - 1000000)

Committed Burst Size (CBS):
40000
(Range: 4096 - 16762902)

Apply
Close

Step 6. Click either **Port** to choose a specific port or click **LAG** to choose a link aggregation (bundle of ports).

Step 7. From the Interface drop-down list, choose the Port/LAG you would like to edit.

Step 8. For queues 1-4, check the **Enable** check box for each queue that you wish to enable egress shaping.

Step 10. In the Committed Information Rate (CIR) field, enter the maximum rate of data that can be sent in kilobits per second (kbps). The value ranges from 64 to 1000000 kbps.

Step 11. In the Committed Burst Size (CBS) field, enter the maximum burst size of data that can be sent in bytes. The value ranges from 4096 to 16762902 bytes. CBS is the amount of data that is allowed to be sent if a burst of data exceeds the CIR.

Step 12. Click **Apply** to save the settings and then click **Close** to exit the *Edit Egress Shaping Per Queue* window, or click **Close** to discard the settings.

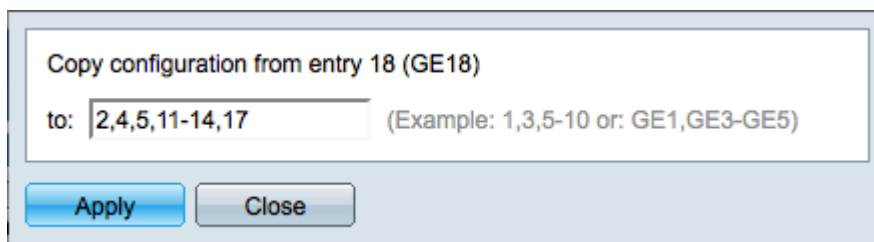
Copy Egress Shaping per Queue

Step 1. Log in to the web configuration utility and choose **Quality of Service > General > Egress Shaping per Queue**. The *Egress Shaping per Queue* page opens:

Step 2. From the Interface Type drop down list, choose **Port** to have a list of ports displayed or choose **LAG** to have a list of link aggregations displayed and the click **Go**.

Step 4. Click the radio button of the Port/LAG that you wish to edit.

Step 5. Click **Copy Settings** to copy the settings of the selected Port/LAG to another Port/LAG. The *Copy Settings* window appears:

A screenshot of a 'Copy Settings' dialog box. The dialog has a light blue border and a white background. At the top, it says 'Copy configuration from entry 18 (GE18)'. Below this, there is a text input field with the value '2,4,5,11-14,17'. To the right of the input field, there is a hint text '(Example: 1,3,5-10 or: GE1,GE3-GE5)'. At the bottom of the dialog, there are two buttons: 'Apply' and 'Close'.

Step 6. In the Copy configuration field, enter the Ports/LAGs to which you wish to copy the settings of the selected port.

Step 7. Click **Apply** to save the settings or click **Close** to discard the settings.