

Bandwidth Settings of Ingress and Egress Interfaces on SFE/SGE Managed Switches

Objective

Bandwidth refers to the average successful data transfer through a communication path. Bandwidth shaping, bandwidth management, bandwidth cap and bandwidth allocation are some of the techniques used to improve bandwidth utilization. For incoming and outgoing traffic you can set different bandwidth.

The objective of this article is to guide you on how to edit bandwidth settings.

Applicable Devices

- SFE/SGE Managed Switches

Software Version

- v3.0.2.0

Bandwidth Settings

Step 1. Log in to the Switch Configuration Utility and choose **Quality of Service > General > Bandwidth**. The *Bandwidth* page opens:

Bandwidth

Ports LAGs

Interface	Ingress Rate Limit		Egress Shaping Rates			
	Status	Rate Limit	Status	CIR	CbS	
1/g1	Enable	3500	Enable	64	128000	Edit
1/g2	Disable		Disable			Edit
1/g3	Disable		Disable			Edit
1/g4	Disable		Disable			Edit
1/g5	Disable		Disable			Edit
1/g6	Disable		Disable			Edit
1/g7	Disable		Disable			Edit
1/g8	Disable		Disable			Edit
1/g9	Disable		Disable			Edit
1/g10	Disable		Disable			Edit

Bandwidth Page contains the following fields:

- **Ingress Rate Limit** — When enabled, it shows the rate limit for ingress interfaces. Ingress traffic refers to the incoming traffic. It shows what is the traffic limit for ingress interfaces. For FE (Fast Ethernet) port the bandwidth assigned will be in the range 62 - 100,000 Kbps whereas for GE (Gigabit Ethernet) ports the bandwidth range will in the range 62 - 1,000,000 Kbps.
- **Egress Shaping Rate** — When enabled, Shaping Rate shows, what is the maximum bandwidth allowed on egress interfaces. Egress traffic refers to outgoing traffic.
 - **CIR (Committed Information Rate)** — Specifies amount of guaranteed bandwidth on a frame relay service. It basically guarantees that frames which are within CIR level will be delivered, but it is not guaranteed when frames exceed this limit. For FE ports the shaping rate is in the range 64 - 62,500 Kbps while for GE ports it is in the range 64 - 1,000,000 Kbps.
 - **CBS (Committed Burst Size)** — Committed burst size is the amount of data that a network accepts in a given committed rate measurement interval (Tc). Tc is defined as ratio of CBS to CIR. The CBS can be in the range of 4096 - 16,769,020 bytes. For GE interfaces it is possible to determine CBS

Step 2. Click **Edit** to edit the particular interface. The *Edit Bandwidth* window opens:

Edit Bandwidth

Interface Port 1/g1 LAG 1

Enable Egress Shaping Rate

Committed Information Rate (CIR)

Committed Burst Size (CBS)

Enable Ingress Rate Limit

Ingress Rate Limit

Step 3. (Optional) To select an interface click either Port or LAG. Click **Port** if you want apply bandwidth settings on particular Port or click **LAG** (Link Aggregation) if you want to add a bundle of few or all individual ports. Then choose a particular value from the drop-down list next to it.

Step 4. Check the **Enable Egress Shaping Rate** check box, if you want to define outgoing traffic bandwidth.

Step 5. Enter the desired value in the Committed Information Rate (CIR) field.

Step 6. Enter the desired value in the Committed Burst Size (CBS) field.

Step 7. Check the **Enable Ingress Rate Limit** check box, if you want to define incoming traffic bandwidth.

Step 8. Enter the desired value in the Ingress Rate Limit field.

Step 9. Click **Apply**. The required Bandwidth settings are added. Click **Close** to return to the *Bandwidth* page.

Caution: This only saves your configuration to the running configuration file. This means any changes made will be lost if the device is rebooted. If you wish to save these changes even after a system reboot, you must copy the running configuration file to the start up configuration file. See [Copy Configuration File on SFE/SGE Series Managed Switches](#) for more information on how to do this.