

How to Create and Apply QoS Bands

<https://campus.barracuda.com/doc/73699555/>

The firewall provides traffic shaping to prioritize network resources according to a number of factors such as time of day, application type, and user identity. Set weight ratios for transport classes enable traffic shaping in the firewall and specify a bandwidth for each interface you want to enable QoS on.

Step 1. (optional) Customize Class Weights and Rate Limits

Set the weight ratios for the classes within the same queue and modify the rate limits.

1. Go to **FIREWALL > QoS**.
2. Modify weight ratios and rate limits according to your requirements.

Class 1 Weight Ratio:	<input type="text" value="10"/>	<input type="text" value="77 %"/>	<small>The weight given Class 1 traffic relative to the other classes in the same queue; percentage of bandwidth allocated to it is shown in gray.</small>
Class 2 Weight Ratio:	<input type="text" value="2"/>	<input type="text" value="15 %"/>	<small>The weight given Class 2 traffic relative to the other classes in the same queue.</small>
Class 3 Weight Ratio:	<input type="text" value="1"/>	<input type="text" value="8 %"/>	<small>The weight given Class 3 traffic relative to the other classes in the same queue.</small>
Internet Degradation Threshold:	<input type="text" value="10"/>	MB	<small>When the amount of traffic transmitted over a connection has reached the threshold, the connection will be downgraded to class 3 in the regular queue. Default: 10 MB</small>
Limiting Queues Max. Throughput:	<input type="text" value="5"/>	%	<small>The max. percentage of bandwidth allocated to traffic from Rate Limiting Queues. Default: 5%</small>
Choke Limit:	<input type="text" value="0.1"/>	%	<small>The percentage of bandwidth allocated to traffic with the Choke bandwidth policy. Maximum value is 5%. Default: 0.1%</small>

3. Click **Save**.

Step 2. Enable Traffic Shaping in the Firewall

1. Go to **NETWORK > IP Configuration**.
2. In the **Network Interface Configuration** section, edit the interface. The **QoS & Link Speed Settings** window opens.
3. Select the check box next to the **Enable Bandwidth Management** column.
4. Enter the bandwidth assigned by your ISP for outbound and inbound connections.

QoS & Link Speed Settings ?

Interface Name: eth2

Available Outbound Bandwidth: Mbps ☒ Enable Bandwidth Management

Available Inbound Bandwidth: Mbps ☒ Enable Bandwidth Management

MTU:

Speed: ☒ Auto-Negotiate ☐ Force

5. Click **Save**.

Step 3. Assign a Bandwidth Policy to an Access Rule

1. Go to **FIREWALL > Access Rules** and edit the rule.
2. Select the bandwidth policy from the **Adjust Bandwidth** drop-down menu.

Edit Access Rule ?

General **Advanced**

Action:

Name:

Bi-directional: ☐ Yes ☒ No

Disable: ☐ Yes ☒ No

Description:

IPS: ☐ Yes ☒ No

Application Control: ☐ Yes ☒ No

SSL Interception: ☐ Yes ☒ No

URL Filter: ☐ Yes ☒ No

Virus Scanner: ☐ Yes ☒ No

ATP: ☐ Yes ☒ No

Mail Security: ☐ Yes ☒ No

Safe Search: ☐ Yes ☒ No

Connection:

Adjust Bandwidth:

The interface must have bandwidth management enabled on the **NETWORK > IP Configuration** page for this policy to be applied.

*DNAT (port forwarding) - Redirect traffic to a specific IP address.
Redirect to Service - Redirect traffic to a service on the Barracuda NextGen Firewall.
Bi-directional - Source and destination networks are interchangeable.*

3. Click **Save**.

Monitor Bandwidth Policy Assignment

To monitor which bandwidth policy is assigned to active network sessions, go to **BASIC > Active Connections**. The assigned policy of a network session is displayed in the **Bandwidth Policy** column.

Figures

1. conf_ti.png
2. qos_band.png
3. qos_select.png

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