

Defining CoS Schedulers (J-Web Procedure)

Using schedulers, you can assign attributes to queues and thereby provide congestion control for a particular class of traffic. These attributes include the amount of interface bandwidth, memory buffer size, transmit rate, and schedule priority.

To configure schedulers using the Configuration pages:

1. Create a scheduler and specify attributes for it. For a description of scheduler-related fields, see Table 1 on page 1.
2. Associate the scheduler to a forwarding class. Because the forwarding class is assigned to a queue number, the queue inherits this scheduler's attributes. For a description of scheduler map-related fields, see Table 1 on page 1.

Table 1: Schedulers Configuration Page Summary

Field	Function	Your Action
Scheduler Summary		
Scheduler Name	Displays the names of defined schedulers. Allows you to edit a specific scheduler.	To edit a scheduler, click its name.
Scheduler Information	Displays a summary of defined settings for a scheduler, such as bandwidth, delay buffer size, and transmit rates.	None.
Add	Opens a page that allows you to add a scheduler.	Click Add .
Delete	Removes a scheduler.	Click Delete .
Add a Scheduler/Edit Scheduler		
Scheduler Name	Specifies the name for a scheduler.	To name a scheduler, type the name—for example, be-scheduler .

Table 1: Schedulers Configuration Page Summary (continued)

Field	Function	Your Action
Buffer Size	<p>Defines the size of the delay buffer.</p> <p>By default, queues 0 through 7 have the following percentage of the total available buffer space:</p> <ul style="list-style-type: none"> ■ Queue 0—95 percent ■ Queue 1—0 percent ■ Queue 2—0 percent ■ Queue 3—0 percent ■ Queue 4—0 percent ■ Queue 5—0 percent ■ Queue 6—0 percent ■ Queue 7—5 percent <p>NOTE: A large buffer size value correlates with a greater possibility of packet delays. This might not be practical for sensitive traffic such as voice or video.</p>	<p>To define a delay buffer size for a scheduler, select the appropriate option:</p> <ul style="list-style-type: none"> ■ To specify no buffer size, select Unconfigured. ■ To specify buffer size as a percentage of the total buffer, select Percent and type an integer from 1 through 100. ■ To specify buffer size as the remaining available buffer, select Remainder.
Scheduling Priority	<p>Sets the transmission priority of the scheduler, which determines the order in which an output interface transmits traffic from the queues.</p> <p>You can set scheduling priority at different levels in an order of increasing priority from low to high.</p> <p>A high-priority queue with a high transmission rate might lock out lower-priority traffic.</p>	<p>To specify a priority, select one:</p> <ul style="list-style-type: none"> ■ low—Packets in this queue are transmitted last. ■ strict—high—Packets in this queue are transmitted first.
Transmit Rate	<p>Defines the transmission rate of a scheduler.</p> <p>The transmit rate determines the traffic bandwidth from each forwarding class you configure.</p> <p>By default, queues 0 through 7 have the following percentage of transmission capacity:</p> <ul style="list-style-type: none"> ■ Queue 0—95 percent ■ Queue 1—0 percent ■ Queue 2—0 percent ■ Queue 3—5 percent ■ Queue 4—0 percent ■ Queue 6—0 percent ■ Queue 7—5 percent 	<p>To define a transmit rate, select the appropriate option:</p> <ul style="list-style-type: none"> ■ To not specify transmit rate, select Unconfigured. ■ To specify the remaining transmission capacity, select Remainder Available. ■ To specify a percentage of transmission capacity, select Percent and type an integer from 1 through 100. <p>To enforce the exact transmission rate or percentage you configured, select the Exact Transmit Rate check box.</p>

Table 2: Scheduler Maps Configuration Page Summary

Field	Function	Your Action
Scheduler Maps Summary		
Scheduler Map Name	Displays the names of defined scheduler maps. Scheduler maps link schedulers to forwarding classes. Allows you to edit a scheduler map.	To edit a scheduler map, click its name.
Scheduler Map Information	For each map, displays the schedulers and the forwarding classes that they are assigned to.	None.
Add	Opens a page that allows you to add a scheduler map.	Click Add .
Delete	Removes a scheduler map.	Select it and click Delete .
Add a Scheduler Map/Edit Scheduler Map		
Scheduler Map Name	Specifies the name for a scheduler map.	To name a map, type the name—for example, be-scheduler-map .
Scheduler Mapping	Allows you to associate a preconfigured scheduler with a forwarding class. After scheduler maps have been applied to an interface, they affect the hardware queues, packet schedulers.	To associate a scheduler with a forwarding class, locate the forwarding class and select the scheduler in the box next to it.
Related Topics		
■ Defining CoS Schedulers (CLI Procedure)		
■ Example: Configuring CoS on EX-series Switches		
■ Monitoring CoS Scheduler Maps		

