

Configuring Low-Latency Mode for Per-Port Queuing on ATM Interfaces

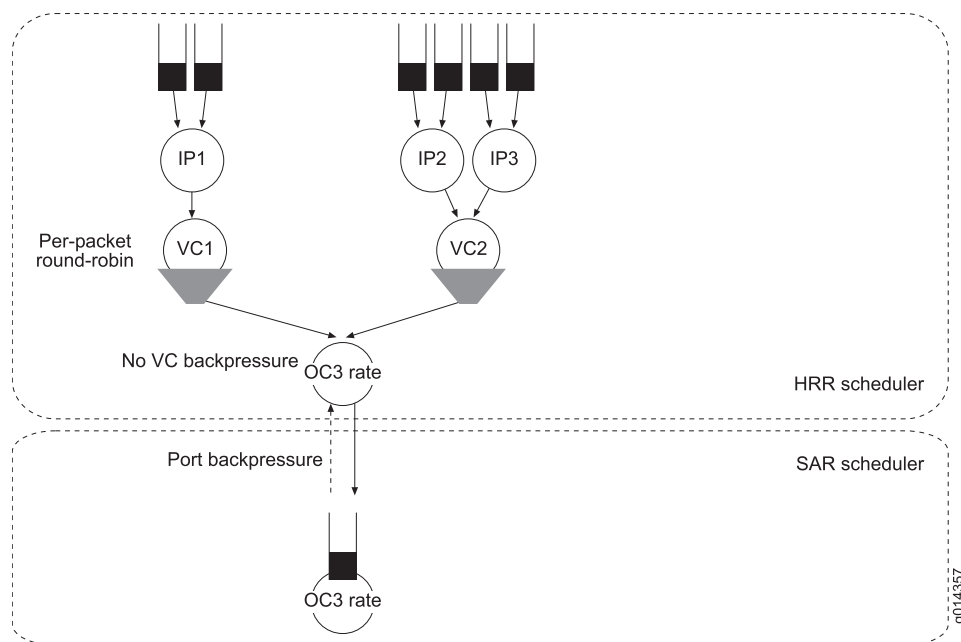
In low-latency mode, the SAR scheduler backpressures the HRR scheduler per physical port; each physical port buffers only a few kilobytes.

When you configure low-latency mode:

- VC backpressure is disabled.
- Port backpressure is enabled as aggressive.
- SAR scheduler performs minimal buffering.
- HRR scheduler is dominant.

This procedure creates the low-latency mode configuration shown in Figure 1 on page 1.

Figure 1: Low-Latency Mode



To configure low-latency mode with a strict-priority queue and a best-effort queue:

1. Configure the traffic class.

```
host1(config)#traffic-class strict
host1(config-traffic-class)#exit
```

2. Set the traffic class in the traffic-class group.

```
host1(config)#traffic-class-group strict
host1(config-traffic-class-group)#traffic-class strict
host1(config-traffic-class-group)#exit
```

3. Define the scheduler profile for the traffic-class group.

```
host1(config)#scheduler-profile strict  
host1(config-scheduler-profile)#strict-priority  
host1(config-scheduler-profile)#exit
```

4. Configure the QoS profile with two ATM VC queues.

```
host1(config)#qos-profile low-latency-q-p  
host1(config-qos-profile)#atm-vc node  
host1(config-qos-profile)#atm-vc queue traffic-class best-effort  
host1(config-qos-profile)#atm group strict scheduler-profile strict  
host1(config-qos-profile)#atm-vc queue traffic-class strict  
host1(config-qos-profile)#exit
```

5. From the desired port, set the QoS port mode to low latency.

```
host1(config)#interface atm 2/0  
host1(config-if)#qos-mode-port low-latency  
host1(config-if)#qos-profile low-latency-q-p
```



TIP: For ATM interfaces on ERX-7xx models, ERX-14xx models, and the ERX-310 router, you must specify port 0.

The **qos-mode-port** command:

- Excludes non-UBR ATM QoS services on any VC on the ATM module; for example, PCR, nrtVBR, and CBR
- Cannot be used if shaping is currently configured on the SAR scheduler
- Cannot be used with ATM VP tunnels with nonzero rates; however, can be used with tunnels with rates of zero (shapeless tunnels).

- Related Topics**
- Per-Packet Queuing on the SAR Scheduler Overview
 - Guidelines for Configuring QoS over ATM
 - interface atm command
 - qos-mode-port command
 - qos-profile command