

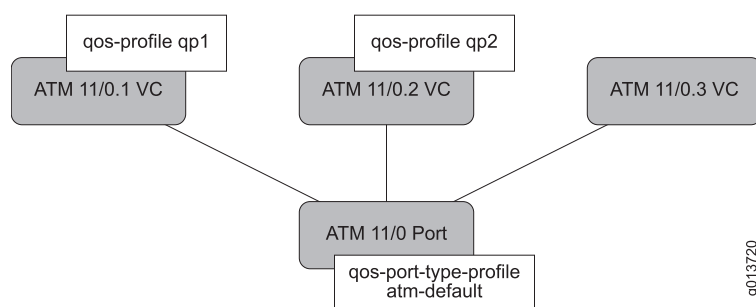
Example: Port-Type QoS Profile Attachment

In this example, three ATM subinterfaces are configured on an ATM port:

- ATM 11/0.1—QoS profile qp1 is attached
- ATM 11/0.2—QoS profile qp2 is attached
- ATM 11/0.3—No QoS profile is attached

The major ATM interface, 11/0, does not have a QoS profile explicitly attached. Therefore, by default the atm-default QoS port-type profile is attached.

Figure 1: Attaching QoS Profiles to ATM Subinterfaces



To configure this example:

1. Create and configure QoS profile qp1.

```
host1(config)#qos-profile qp-1
host1(config-qos-profile)#atm-vp node scheduler-profile sp1
host1(config-qos-profile)#atm-vc queue traffic-class tc1 scheduler-profile sp1
queue-profile qp1
host1(config-qos-profile)#atm-vc queue traffic-class tc2 scheduler-profile sp2
queue-profile qp2
host1(config-qos-profile)#atm-vc queue traffic-class tc3 scheduler-profile sp3
queue-profile qp3
host1(config-qos-profile)#atm-vc queue traffic-class tc4 scheduler-profile sp4
queue-profile qp4
host1(config-qos-profile)#atm-vc queue traffic-class tc5 scheduler-profile sp5
queue-profile qp5
host1(config-qos-profile)#exit
```

2. Create and configure QoS profile qp2.

```
host1(config)#qos-profile qp2
host1(config-qos-profile)#atm-vp node scheduler-profile sp1
host1(config-qos-profile)#atm-vc queue traffic-class tc1 scheduler-profile sp1
queue-profile qp1
host1(config-qos-profile)#atm-vc queue traffic-class tc2 scheduler-profile sp2
queue-profile qp2
host1(config-qos-profile)#atm-vc queue traffic-class tc3 scheduler-profile sp3
queue-profile qp3
host1(config-qos-profile)#exit
```

3. Attach the QoS profiles to the ATM subinterfaces, as shown in Figure 1 on page 1.

```

host1(config)#interface atm 11/0.1
host1(config-subif)#qos-profile qp1
host1(config-subif)#exit
host1(config)#interface atm 11/0.2
host1(config-subif)#qos-profile qp2
host1(config-subif)#exit

```

4. Display the QoS interface hierarchy for ATM interface 11/0. This display shows all QoS attachments above interface 11/0.

If no QoS profiles are attached above the specified interface, the router shows the first attachment below the specified interface.

```

host1# show qos interface-hierarchy interface atm 11/0
attachment@ atm-vc ATM11/0.2:

```

qos profile	interface type	rule type	traffic class	scheduler profile	queue profile	t-class group
qp2@ATM11/0.2	atm-vc	node		sp1	default	
qp2@ATM11/0.2	atm-vc	queue	tc1	sp1	qp1	
qp2@ATM11/0.2	atm-vc	queue	tc2	sp2	qp2	
qp2@ATM11/0.2	atm-vc	queue	tc3	sp3	qp3	
atm-default	@atm ip	node		default	default	
atm-default	@atm atm-vc	node		default	default	
atm-default	@atm Bridge	node		default	default	
atm-default	@atm ipv6	node		default	default	
atm-default	@atm ip	queue	best-effort	default	default	
atm-default	@atm atm	queue	best-effort	default	default	
atm-default	@atm atm-vc	queue	best-effort	default	default	
atm-default	@atm Bridge	queue	best-effort	default	default	
atm-default	@atm ipv6	queue	best-effort	default	default	

```

attachment@ atm-vc ATM11/0.1:

```

qos profile	interface type	rule type	traffic class	scheduler profile	queue profile	t-class group
qp1@ATM11/0.1	atm-vc	node		sp1	default	
qp1@ATM11/0.1	atm-vc	queue	tc1	sp1	qp1	
qp1@ATM11/0.1	atm-vc	queue	tc2	sp2	qp2	
qp1@ATM11/0.1	atm-vc	queue	tc3	sp3	qp3	
qp1@ATM11/0.1	atm-vc	queue	tc4	sp4	qp4	
qp1@ATM11/0.1	atm-vc	queue	tc5	sp5	qp5	
atm-default	@atm ip	node		default	default	
atm-default	@atm atm-vc	node		default	default	
atm-default	@atm Bridge	node		default	default	
atm-default	@atm ipv6	node		default	default	
atm-default	@atm ip	queue	best-effort	default	default	
atm-default	@atm atm	queue	best-effort	default	default	
atm-default	@atm atm-vc	queue	best-effort	default	default	
atm-default	@atm Bridge	queue	best-effort	default	default	
atm-default	@atm ipv6	queue	best-effort	default	default	

ATM subinterface 11/0.3 was not shown because no QoS profile is attached to it. You can display the QoS interface hierarchy for subinterface 11/0.3 by specifying the subinterface, as shown below. In this case, the QoS port-type profile, atm-default, is attached (by default) to the ATM major interface, ATM 11/0, below ATM subinterface 11/0.3. Because no QoS profile is attached to this ATM subinterface, the QoS port-type profile is applied.

The @atm in the qos profile column indicates that the row comes from a default QoS port-type profile that is below the interfaces shown: subinterfaces ATM 11/0.2 and ATM 11/0.1 in this example.

You can explicitly show the ATM subinterface that has no explicit QoS profile attachment, as shown below. In this case, attachment@ indicates the ATM major interface (11/0) below the subinterface.

```
host1# show qos interface-hierarchy interface atm 11/0.3
attachment@ atm ATM11/0:
  qos      interface  rule  traffic      scheduler  queue  t-class
profile    type      type  class        profile    profile group
-----
atm-default@atm  ip          node                default    default
atm-default@atm  atm-vc      node                default    default
atm-default@atm  Bridge     node                default    default
atm-default@atm  ipv6       node                default    default
atm-default@atm  ip         queue best-effort    default    default
atm-default@atm  atm        queue best-effort    default    default
atm-default@atm  atm-vc     queue best-effort    default    default
atm-default@atm  Bridge     queue best-effort    default    default
atm-default@atm  ipv6       queue best-effort    default    default
```

