

Configuring a Parameter Definition for IP Multicast Bandwidth Adjustment

Before you configure a parameter definition for IP multicast bandwidth:

- Define a multicast bandwidth map and the QoS adjustment for a virtual router.

See *JUNOS Multicast Routing Configuration Guide*.

To associate a parameter instance with the IP multicast bandwidth adjustment application:

1. Configure traffic classes.

```
host1(config)#traffic-class voice
host1(config-traffic-class)#exit
host1(config)#traffic-class best-effort
host1(config-traffic-class)#exit
```

2. Create a parameter definition.

- a. Configure the QoS parameter name and the application.

```
host1(config)#qos-parameter-define ipm application ip-multicast hierarchical
```

- b. Configure a controlled-interface type.

```
host1(config-qos-parameter-define)#controlled-interface-type vlan
host1(config-qos-parameter-define)#exit
```

3. Create a parameter instance that globally defines the value of the IP multicast adjustment as 0.

```
host1(config)#qos-parameter ipm 0
```

4. Reference the parameter within a scheduler profile parameter expression.

```
host1(config)#scheduler-profile vlan-subscriber
host1(config-scheduler-profile)#shared-shaping-rate 1000000 - ipm burst 50
milliseconds auto
host1(config-scheduler-profile)#exit
```

5. Add the scheduler profile to a QoS profile.

```
host1(config)#qos-profile vlan-subscriber
host1(config-qos-profile)#vlan queue traffic-class best-effort
host1(config-qos-profile)#vlan queue traffic-class voice scheduler-profile 192k
host1(config-qos-profile)#vlan node scheduler-profile vlan-subscriber
host1(config-qos-profile)#exit
```

6. Attach the parameter definition to a logical interface.

```
host1(config)#interface gigabitEthernet 7/0
host1(config-if)#encapsulation vlan
host1(config-if)#exit
host1(config)#interface gigabitEthernet 7/0.1
```

```
host1(config-if)#vlan id 200  
host1(config-if)#qos-profile vlan-subscriber  
host1(config-if)#ip address 1.1.1.1 255.255.255.0
```

After the QoS profile is attached to the interface, the IP multicast bandwidth adjustment application begins to adjust rates based on IGMP joins and leaves received on that interface.

- Related Topics**
- IP Multicast Bandwidth Adjustment for QoS Overview
 - Example: QoS Parameter Configuration for IP Multicast Bandwidth Adjustment
 - controlled-interface-type
 - encapsulation vlan
 - interface gigabitEthernet
 - node
 - qos-parameter-define
 - qos-profile
 - queue
 - scheduler-profile
 - shared-shaping-rate
 - traffic-class
 - vlan id

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