Ingress Metering - QoS Flow and QoS meter profile

***Objective:***

Objective is to create QoS flow and QoS meter profile. Parent interface for QoS flow is on flow point only, logical port as parent interface is NOT supported.

The classifiers that can be used to create QoS flow are:

51xx : single vlan, double vlan, untagged, internal cos, or any

39xx : single vlan, untagged, single vlan + PCP, IPv4 based DSCP, Ipv6 based DSCP, DSCP+Mask, or any

***Procedure:***

* Create ingress meter profile (~2G) and ensure that the profile can be attached to QoS flow:
  + meter-profiles meter-profile **mp2G-qos** cir **2000000** cbs 256 eir **10000** ebs 128 color-aware false coupling-flag false shared-meter-instance false valid-interface-type **qos-flow**
  + meter-profiles meter-profile **mp2G-qos2** cir **2000000** cbs 256 eir **10000** ebs 128 color-aware false coupling-flag false shared-meter-instance false valid-interface-type **qos-flow**
* Create ingress meter profiles and ensure that the profile can be attached to a parent flow point.
  + meter-profiles meter-profile **mp7G** cir **6000000** cbs 256 eir **500000** ebs 128 color-aware false coupling-flag false shared-meter-instance true valid-interface-type **flow-point**
  + meter-profiles meter-profile **mp4G-fp** cir **4000000** cbs 256 eir **10000** ebs 128 color-aware false coupling-flag false shared-meter-instance true valid-interface-type **flow-point**
  + meter-profiles meter-profile **mp2G-fp** cir **2000000** cbs 256 eir **10000** ebs 128 color-aware false coupling-flag false shared-meter-instance true valid-interface-type **flow-point**
* Validate the meter profiles:

5170-0010-R1> **show meter-profiles**

+ METER PROFILE +

| Name | CIR Kbps | EIR Kbps |

+ + + +

| **mp2G-fp** | 2000000 | 10000 |

| **mp2G-qos** | 2000000 | 10000 |

| **mp2G-qos2** | 2000000 | 10000 |

| **mp4G-fp** | 4000000 | 10000 |

| mp6G-qos | 6000000 | 10000 |

| **mp7G** | 6000000 | 500000 |

| mp600M | 200000 | 400000 |

+ + + +

* Create the classifier to use for QoS flow. classifiers classifier internalcos8 filter-entry internal-cos internal-cos 8 exit

classifiers classifier anycos filter-entry any

exit

* Create QoS flow that uses the “mp2G-qos” and “mp2G-qos2” meter profiles.

##create QoS flow that classifies on internal Cos of 8 or 16. qos-flows qos-flow qf1-cos8-cos16 meter-profile **mp2G-qos**

parent-fp CustomerQos classifier-list internalcos8 classifier-list internalcos16 classifier-list-precedence 10 stats-collection on

exit exit

##create QoS flow that is a catch all QoS flow.

qos-flows qos-flow **qos-catchall**

meter-profile **mp2G-qos2** parent-fp CustomerQos classifier-list anycos classifier-list-precedence 11 stats-collection on

exit exit

* Validate the QoS flows.

5170-0010-R1> show qos-flows

+

QOS FLOWS +

| Name | Meter Profile | Parent Logical Port | Parent Flow Point | Stats Collection |

+ + + + + +

| qf1-cos8-cos16 | mp2G-qos | - | CustomerQos | on |

| qos-catchall | mp2G-qos2 | - | CustomerQos | on |

+ + +

+

+

+ + + QOS FLOWS STATS

| Name | Accepted Bytes | Accepted Frames | Yellow Bytes | Yellow Frames | Dropped Bytes | Dropped Frames |

+ + +

+

+ + + +

| qf1-cos8-cos16 | 0 | 0 | 0 | 0 | 0 | 0

|

| qos-catchall | 0 | 0 | 0 | 0 | 0 | 0

|

+ + +

+

+ + + +

* Next step is to setup meter profiles on parent flow point, please see next testcase.

Test Case Results:

Passed: Yes No Verified by Date/Time Comments