QoS op Catalyst 6800ia access poorten - Configuratievoorbeeld

Inhoud

Inleiding

Dit document beschrijft hoe u de Quality of Service (QoS) van Cisco Catalyst 6800ia host-poorten kunt configureren, controleren en oplossen. QoS wordt ondersteund op 6800ia host-poorten in Cisco IOS® softwarerelease 152.1.SY en later op een Catalyst 6800 parent Virtual Switching System (VSS).

Voorwaarden

Vereisten

Er zijn geen specifieke vereisten van toepassing op dit document.

Gebruikte componenten

De informatie in dit document is gebaseerd op de volgende software- en hardware-versies:

- Cisco IOS-softwarerelease 15.2.1.SY
- Cisco Catalyst 6800 ouder-VSS

De informatie in dit document is gebaseerd op de apparaten in een specifieke laboratoriumomgeving. Alle apparaten die in dit document worden beschreven, hadden een opgeschoonde (standaard)configuratie. Als uw netwerk live is, moet u de potentiële impact van elke opdracht begrijpen.

Achtergrondinformatie

De configuratiemodus op een Catalyst 6800ia is uitgeschakeld en alle QoS-configuraties voor 6800ia host-poorten moeten vanaf de parent worden uitgevoerd. QoS voor 6800ia host-poort wordt geconfigureerd met een beleidskaart. Wanneer toegepast op de interfaces, drukt deze beleidskaart de relevante configuratie intern naar de 6800ia en programmeert vervolgens de hardwarewachtrijen.

6800ia host-poorten hebben 1p3q3t architectuur in transport (TX) richting. Alle configuratievoorbeelden in dit document zijn alleen van toepassing op TX wachtrijen op een 6800ia.

Wanneer er geen expliciete QoS-configuratie aanwezig is op de 6800ia-interfaces in de standaardinstelling, kan de 6800ia host-interface er vergelijkbaar uitzien met deze voorbeelduitvoer:

```
6880-VSS#show run int gi101/1/0/1

interface GigabitEthernet101/1/0/1
 switchport
 switchport trunk allowed vlan 500
 switchport mode access
 switchport access vlan 500
 load-interval 30
end

6880-VSS#show queueing interface gi101/1/0/1
Interface GigabitEthernet101/1/0/1 queueing strategy:  Weighted Round-Robin

 Port QoS is disabled globally
 Queueing on Gi101/1/0/1: Tx Enabled Rx Disabled

Trust boundary disabled

 Trust state: trust DSCP
 Trust state in queueing: trust DSCP
 Default COS is 0
   Queueing Mode In Tx direction: mode-dscp
   Transmit queues [type = 1p3q3t]:
   Queue Id    Scheduling  Num of thresholds
   -----------------------------------------
      1         Priority            3
      2         WRR                 3
      3         WRR                 3
      4         WRR                 3

   WRR bandwidth ratios:  100[queue 2] 100[queue 3] 100[queue 4]   0[queue 5]
   queue-limit ratios:     15[Pri Queue]  25[queue 2]  40[queue 3]  20[queue 4]

   queue thresh dscp-map
   ---------------------------------------
   1     1      32 33 40 41 42 43 44 45 46 47
   1     2
   1     3
   2     1      16 17 18 19 20 21 22 23 26 27 28 29 30 31 34 35 36 37 38 39
   2     2      24
   2     3      48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63
```

```
3     1       25
3     2
3     3       0 1 2 3 4 5 6 7
4     1       8 9 11 13 15
4     2       10 12 14
4     3
```

Configureren

Configuratievoorbeeld 1: Bandbreedte wachtrij

Dit voorbeeld toont hoe u bandbreedte voor 6800ia TX wachtrijen kunt configureren:

1. Configuratie van **class-maps** om het verkeer van belangen te classificeren:
```
class-map type lan-queuing match-any ltest
 match dscp 32
class-map type lan-queuing match-any ltest1
 match dscp 24
class-map type lan-queuing match-any ltest2
 match dscp default
```
2. Geef prioriteit en bandbreedte aan geconfigureerde klassen toe:
```
policy-map type lan-queuing ltest
 class type lan-queuing ltest
   priority
 class type lan-queuing ltest1
   bandwidth remaining percent 30
 class type lan-queuing ltest2
   bandwidth remaining percent 20
 class class-default
```
3. Pas **beleidskaart toe** op de interface in kwestie van 6800ia:Opmerking: Wanneer u een **LAN-wachtrij beleidskaart** op één poort op een 6800ia-stapel toepast, verspreidt het de veranderingen in alle poorten in de stapel.
```
6880-VSS#conf t
6880-VSS(config)#int gi101/1/0/1
6880-VSS(config-if)#service-policy type lan-queuing output ltest
Propagating [attach] lan queueing policy "ltest" to Gi101/1/0/1 Gi101/1/0/2 Gi101/1/0/3
Gi101/1/0/4 Gi101/1/0/5 Gi101/1/0/6 Gi101/1/0/7 Gi101/1/0/8 Gi101/1/0/9 Gi101/1/0/10
Gi101/1/0/12 Gi101/1/0/13 Gi101/1/0/14 Gi101/1/0/15 Gi101/1/0/16 Gi101/1/0/17
Gi101/1/0/18 Gi101/1/0/19 Gi101/1/0/20 Gi101/1/0/21 Gi101/1/0/22 Gi101/1/0/23
Gi101/1/0/24 Gi101/1/0/25 Gi101/1/0/26 Gi101/1/0/27 Gi101/1/0/28 Gi101/1/0/29
Gi101/1/0/30 Gi101/1/0/31 Gi101/1/0/32 Gi101/1/0/33 Gi101/1/0/34 Gi101/1/0/35
Gi101/1/0/36 Gi101/1/0/37 Gi101/1/0/38 Gi101/1/0/39 Gi101/1/0/40 Gi101/1/0/41
Gi101/1/0/42 Gi101/1/0/43 Gi101/1/0/44 Gi101/1/0/45 Gi101/1/0/46 Gi101/1/0/47 Gi101/1/0/48

Propagating [attach] lan queueing policy "ltest" to Gi101/2/0/1 Gi101/2/0/2
Gi101/2/0/3 Gi101/2/0/4 Gi101/2/0/5 Gi101/2/0/6 Gi101/2/0/7 Gi101/2/0/8
Gi101/2/0/9 Gi101/2/0/10 Gi101/2/0/11 Gi101/2/0/12 Gi101/2/0/13 Gi101/2/0/14
Gi101/2/0/15 Gi101/2/0/16 Gi101/2/0/17 Gi101/2/0/18 Gi101/2/0/19 Gi101/2/0/20
Gi101/2/0/21 Gi101/2/0/22 Gi101/2/0/23 Gi101/2/0/24 Gi101/2/0/25 Gi101/2/0/26
Gi101/2/0/27 Gi101/2/0/28 Gi101/2/0/29 Gi101/2/0/30 Gi101/2/0/31 Gi101/2/0/32
Gi101/2/0/33 Gi101/2/0/34 Gi101/2/0/35 Gi101/2/0/36 Gi101/2/0/37 Gi101/2/0/38
Gi101/2/0/39 Gi101/2/0/40 Gi101/2/0/41 Gi101/2/0/42 Gi101/2/0/43 Gi101/2/0/44
Gi101/2/0/45 Gi101/2/0/46 Gi101/2/0/47 Gi101/2/0/48

Propagating [attach] lan queueing policy "ltest" to Gi101/3/0/1 Gi101/3/0/2
Gi101/3/0/3 Gi101/3/0/4 Gi101/3/0/5 Gi101/3/0/6 Gi101/3/0/7 Gi101/3/0/8
Gi101/3/0/9 Gi101/3/0/10 Gi101/3/0/11 Gi101/3/0/12 Gi101/3/0/13 Gi101/3/0/14
Gi101/3/0/15 Gi101/3/0/16 Gi101/3/0/17 Gi101/3/0/18 Gi101/3/0/19 Gi101/3/0/20
```

```
Gi101/3/0/21 Gi101/3/0/22 Gi101/3/0/23 Gi101/3/0/24 Gi101/3/0/25 Gi101/3/0/26
Gi101/3/0/27 Gi101/3/0/28 Gi101/3/0/29 Gi101/3/0/30 Gi101/3/0/31 Gi101/3/0/32
Gi101/3/0/33 Gi101/3/0/34 Gi101/3/0/35 Gi101/3/0/36 Gi101/3/0/37 Gi101/3/0/38
Gi101/3/0/39 Gi101/3/0/40 Gi101/3/0/41 Gi101/3/0/42 Gi101/3/0/43 Gi101/3/0/44
Gi101/3/0/45 Gi101/3/0/46 Gi101/3/0/47 Gi101/3/0/48

Propagating [attach] lan queueing policy "ltest" to Gi101/4/0/1 Gi101/4/0/2
Gi101/4/0/3 Gi101/4/0/4 Gi101/4/0/5 Gi101/4/0/6 Gi101/4/0/7 Gi101/4/0/8
Gi101/4/0/9 Gi101/4/0/10 Gi101/4/0/11 Gi101/4/0/12 Gi101/4/0/13 Gi101/4/0/14
Gi101/4/0/15 Gi101/4/0/16 Gi101/4/0/17 Gi101/4/0/18 Gi101/4/0/19 Gi101/4/0/20
Gi101/4/0/21 Gi101/4/0/22 Gi101/4/0/23 Gi101/4/0/24 Gi101/4/0/25 Gi101/4/0/26
Gi101/4/0/27 Gi101/4/0/28 Gi101/4/0/29 Gi101/4/0/30 Gi101/4/0/31 Gi101/4/0/32
Gi101/4/0/33 Gi101/4/0/34 Gi101/4/0/35 Gi101/4/0/36 Gi101/4/0/37 Gi101/4/0/38
Gi101/4/0/39 Gi101/4/0/40 Gi101/4/0/41 Gi101/4/0/42 Gi101/4/0/43 Gi101/4/0/44
Gi101/4/0/45 Gi101/4/0/46 Gi101/4/0/47 Gi101/4/0/48
6880-VSS(config-if)#
6880-VSS(config-if)#end
```

4. Controleer of **beleidskaart** wordt toegepast:

```
6880-VSS#show run int gi101/1/0/1

interface GigabitEthernet101/1/0/1
 switchport
 switchport trunk allowed vlan 500
 switchport mode access
 switchport access vlan 500
 load-interval 30
 service-policy type lan-queuing output ltest
end
```

5. Controleer class-map om wachtrijkaarten, bandbreedte- en buffertoewijzingen en wachtrij voor Gedifferentieerde Services Code Point (DSCP)-mapping te selecteren:

```
6880-VSS#show queueing int gi101/1/0/1
Interface GigabitEthernet101/1/0/1 queueing strategy:  Weighted Round-Robin

 Port QoS is disabled globally
 Queueing on Gi101/1/0/1: Tx Enabled Rx Disabled

Trust boundary disabled

 Trust state: trust DSCP
 Trust state in queueing: trust DSCP
 Default COS is 0
   Class-map to Queue in Tx direction
   Class-map           Queue Id
   ---------------------------
   ltest                    1
   ltest1                   4
   ltest2                   3
   class-default            2

   Queueing Mode In Tx direction: mode-dscp
   Transmit queues [type = 1p3q3t]:
   Queue Id    Scheduling  Num of thresholds
   -----------------------------------------
      1         Priority            3
      2         WRR                 3
      3         WRR                 3
      4         WRR                 3

   WRR bandwidth ratios:   50[queue 2]  20[queue 3]  30[queue 4]
   queue-limit ratios:     15[Pri Queue] 100[queue 2] 100[queue 3] 100[queue 4]

   queue thresh dscp-map
   ---------------------------------------
```

```
   1     1      32
   1     2
   1     3
   2     1      1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
23 25 26 27 28 29 30 31 33 34 35 36 37 38 39 40 41 42 43
44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63
   2     2
   2     3
   3     1      0
   3     2
   3     3
   4     1      24
   4     2
   4     3
```

6. Dubbele controle van buffer en bandbreedtetoewijzingen uit de 6800ia:Opmerking: Als u voor een bepaalde klasse geen buffergewicht specificeert, duurt het standaard 100%.Wachtrij 1: 15 / [15+100+100+100] = 4Wachtrij 2: 100 / [15+100+100+100]-31Gewichten worden ook afgeleid voor andere wachtrijen.

```
6880-VSS#remote command fex 101 show mls qos int gi1/0/1 buffer

GigabitEthernet1/0/1
The port is mapped to qset : 1
The allocations between the queues are : 4 31 31 34


6880-VSS#remote command fex 101 show mls qos int gi1/0/1 queueing

GigabitEthernet1/0/1
Egress Priority Queue : enabled
Shaped queue weights (absolute) :  0 0 0 0
Shared queue weights  :  0 127 51 76
The port bandwidth limit : 100  (Operational Bandwidth:100.0)
The port is mapped to qset : 1
```

7. Controleer of in de desbetreffende wachtrij interessant verkeer wordt genoteerd en of er druppels zijn:

```
6880-VSS#remote command fex 101 show mls qos int gi1/0/1 statistic

GigabitEthernet1/0/1 (All statistics are in packets)

 dscp: incoming
-------------------------------

 0 -  4 :           0            0            0            0            0
 5 -  9 :           0            0            0            0            0
 10 - 14 :          0            0            0            0            0
 15 - 19 :          0            0            0            0            0
 20 - 24 :          0            0            0            0            0
 25 - 29 :          0            0            0            0            0
 30 - 34 :          0            0            0            0            0
 35 - 39 :          0            0            0            0            0
 40 - 44 :          0            0            0            0            0
 45 - 49 :          0            0            0           13            0
 50 - 54 :          0            0            0            0            0
 55 - 59 :          0            0            0            0            0
 60 - 64 :          0            0            0            0
 dscp: outgoing
-------------------------------

 0 -  4 :           0            0            0            0            0
 5 -  9 :           0            0            0            0            0
 10 - 14 :          0            0            0            0            0
 15 - 19 :          0            0            0            0            0
```

```
 20 - 24 :           0            0            0            0       9118500
 25 - 29 :           0            0            0            0             0
 30 - 34 :           0            0       516236            0             0
 35 - 39 :           0            0            0            0             0
 40 - 44 :           0            0            0            0             0
 45 - 49 :           0            0            0           20             0
 50 - 54 :           0            0            0            0             0
 55 - 59 :           0            0            0            0             0
 60 - 64 :           0            0            0            0
 cos: incoming
------------------------------

 0 -  4 :         106            0            0            0             0
 5 -  7 :           0            0            0
 cos: outgoing
------------------------------

 0 -  4 :          41            0            0      9118505       516236
 5 -  7 :           0            0            0
 output queues enqueued:
 queue:    threshold1   threshold2   threshold3
-----------------------------------------------
 queue 0:      516255           35            5
 queue 1:          12            0            0
 queue 2:           0            0            0
 queue 3:     9118520            0            0

 output queues dropped:
 queue:    threshold1   threshold2   threshold3
-----------------------------------------------
 queue 0:      0           0           0
 queue 1:           0           0           0
 queue 2:           0           0           0
 queue 3:       49823            0           0

Policer: Inprofile:            0 OutofProfile:            0
```

Configuratievoorbeeld 2: Bandbreedte en buffer

Dit voorbeeld toont hoe u bandbreedte en buffers voor 6800ia TX wachtrijen kunt configureren:

1. In de beleidskaart die in voorbeeld 1 gemaakt is, kunt u buffertoewijzingen in de rij specificeren zoals dit voorbeeld laat zien:Opmerking: Als u voor een bepaalde klasse geen buffergewicht specificeert, duurt het standaard 100%.
```
policy-map type lan-queuing ltest
 class type lan-queuing ltest
   priority
   queue-buffers ratio 15
 class type lan-queuing ltest1
   bandwidth remaining percent 30
   queue-buffers ratio 30
 class type lan-queuing ltest2
   bandwidth remaining percent 20
   queue-buffers ratio 40
 class class-default
   queue-buffer ratio 15
```
2. Controleer class-map om wachtrijkaarten, bandbreedte- en buffertoewijzingen en wachtrij voor DSCP-mapping te selecteren:
```
6880-VSS#sh queueing int gi101/1/0/1
Interface GigabitEthernet101/1/0/1 queueing strategy:  Weighted Round-Robin
```

```
 Port QoS is disabled globally
 Queueing on Gi101/1/0/1: Tx Enabled Rx Disabled

Trust boundary disabled

 Trust state: trust DSCP
 Trust state in queueing: trust DSCP
 Default COS is 0
   Class-map to Queue in Tx direction
   Class-map           Queue Id
   ---------------------------
    ltest                   1
   ltest1                  4
   ltest2                  3
   class-default           2

   Queueing Mode In Tx direction: mode-dscp
   Transmit queues [type = 1p3q3t]:
   Queue Id    Scheduling  Num of thresholds
   -----------------------------------------
      1         Priority            3
      2         WRR                 3
      3         WRR                 3
      4         WRR                 3

   WRR bandwidth ratios:   50[queue 2]  20[queue 3]  30[queue 4]
   queue-limit ratios:     15[Pri Queue]  15[queue 2]  40[queue 3]  30[queue 4]

   queue thresh dscp-map
   ---------------------------------------
   1     1      32
   1     2
   1     3
   2     1      1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
22 23 25 26 27 28 29 30 31 33 34 35 36 37 38 39 40 41
42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63
   2     2
   2     3
    3     1      0
   3     2
   3     3
    4     1      24
   4     2
   4     3
```

3. Dubbele controle van buffer en bandbreedtetoewijzingen uit de 6800ia:

```
6880-VSS#remote command fex 101 sh mls qos int gi1/0/1 queueing

GigabitEthernet1/0/1
Egress Priority Queue : enabled
Shaped queue weights (absolute) :  0 0 0 0
Shared queue weights  :  0 127 51 76
The port bandwidth limit : 100  (Operational Bandwidth:100.0)
The port is mapped to qset : 1


6880-VSS#remote command fex 101 sh mls qos int gi1/0/1 buffers

GigabitEthernet1/0/1
The port is mapped to qset : 1
The allocations between the queues are : 15 15 40 30
```

4. Controleer of in de desbetreffende wachtrij interessant verkeer wordt genoteerd en of er druppels zijn:

6880-VSS#remote command fex 101 sh mls qos int gi1/0/1 statistic

GigabitEthernet1/0/1 (All statistics are in packets)

```
 dscp: incoming
-------------------------------

 0 -  4 :           0            0            0            0            0
 5 -  9 :           0            0            0            0            0
 10 - 14 :          0            0            0            0            0
 15 - 19 :          0            0            0            0            0
 20 - 24 :          0            0            0            0            0
 25 - 29 :          0            0            0            0            0
 30 - 34 :          0            0            0            0            0
 35 - 39 :          0            0            0            0            0
 40 - 44 :          0            0            0            0            0
 45 - 49 :          0            0            0          491            0
 50 - 54 :          0            0            0            0            0
 55 - 59 :          0            0            0            0            0
 60 - 64 :          0            0            0            0
 dscp: outgoing
-------------------------------

 0 -  4 :           0            0            0            0            0
 5 -  9 :           0            0            0            0            0
 10 - 14 :          0            0            0            0            0
 15 - 19 :          0            0            0            0            0
 20 - 24 :          0            0            0            0     57864687
 25 - 29 :          0            0            0            0            0
 30 - 34 :          0            0     29364400            0            0
 35 - 39 :          0            0            0            0            0
 40 - 44 :          0            0            0            0            0
 45 - 49 :          0            0            0          775            0
 50 - 54 :          0            0            0            0            0
 55 - 59 :          0            0            0            0            0
 60 - 64 :          0            0            0            0
 cos: incoming
-------------------------------

 0 -  4 :        5323            0            0            0            0
 5 -  7 :           0            0            0
 cos: outgoing
-------------------------------

 0 -  4 :        1718            0            0     57864691     29364400
 5 -  7 :           0            0            0
 output queues enqueued:
 queue:    threshold1   threshold2   threshold3
-----------------------------------------------
 queue 0:    29365402         1883            5
 queue 1:         793    98           0
 queue 2:           0            0            0
 queue 3:   530554174            0            0

 output queues dropped:
 queue:    threshold1   threshold2   threshold3
-----------------------------------------------
 queue 0:    0           10           0
 queue 1:           1        24093           0
 queue 2:           0            0            0
 queue 3:     2309351            0            0

Policer: Inprofile:            0 OutofProfile:            0
```

Verifiëren

Er is momenteel geen verificatieprocedure beschikbaar voor deze configuratie.

Problemen oplossen

Deze sectie bevat informatie waarmee u problemen met de configuratie kunt oplossen.

De Output Interpreter Tool (alleen voor geregistreerde klanten) ondersteunt bepaalde opdrachten met **show.** Gebruik de Output Interpreter Tool om een analyse te bekijken van de output van de opdracht **show.**

> Opmerking: Raadpleeg Important Information on Debug Commands (Belangrijke informatie over opdrachten met debug) voordat u opdrachten met **debug opgeeft.**

1. Schakel **het debug** in voor qos-manager bij de 6800ia CLI. Verzeker u dat loggen opnieuw naar de buffer zijn gericht en dat de houtkapbuffer op een hoog aantal is ingesteld:

```
6880-VSS#attach fex 101
Attach FEX:101 ip:192.168.1.101
Trying 192.168.1.101 ... Open
????????FEX-101>en
Password: cisco
FEX-101#
FEX-101#debug platform qos-manager all
QM verbose debugging is on
QM cops debugging is on
QM events debugging is on
QM Statistics debugging is on
FEX-101#exit
[Connection to 192.168.1.101 closed by foreign host]
```

2. Configureer de **beleidskaart** om uiteinden te activeren:

```
6880-VSS#conf t
6880-VSS(config)#int gi101/1/0/1
6880-VSS(config-if)# service-policy type lan-queuing output ltest
Propagating [attach] lan queueing policy "ltest" to Gi101/1/0/1
Gi101/1/0/2 Gi101/1/0/3 Gi101/1/0/4 Gi101/1/0/5 Gi101/1/0/6 Gi101/1/0/7 Gi101/1/0/8
Gi101/1/0/9 Gi101/1/0/10 Gi101/1/0/12 Gi101/1/0/13 Gi101/1/0/14 Gi101/1/0/15 Gi101/1/0/16
<snip>
6880-VSS(config-if)#end
```

3. Controleer de logbestanden op Fabric extender (FEX) om uitwerpselen te controleren:

```
6880-VSS#remote command fex 101 show log
<snip>
May 20 06:43:18.208: HQM: hulc_fex_qos_priority_handler: hulc_fex_qos_priority_handler:
****Setting Priority Queue (FEX-101)

May 20 06:43:18.208: HQM: hulc_fex_qos_priority_handler: hulc_fex_qos_priority_handler:
subopcode=2 startport=0 endport=0 size=4 (FEX-101)
May 20 06:43:18.208: HQM: hulc_f
_fex_qos_priority_handler:QueueNum=1 PriorityQueue=1 queuetype=2 thresholdsnum=3 (FEX-101)
May 20 06:43:18.212: HQM: hulc_fex_qos_priority_handler: hulc_fex_qos_priority_handler:
```

```
idb=GigabitEthernet1/0/1 (FEX-101)
May 20 06:43:18.212: HQM: hulc_fex_qos_priority_handler: hulc_fex_qos_priority_handler:
idb=GigabitEthernet1/0/2 (FEX-101)
May 20 06:43:18.212: HQM: hulc_fex_qos_priority_handler: hulc_fex_qos_priority_handler:
idb=GigabitEthernet1/0/3 (FEX-101)
<snip>
```

hulc_fex_qos_srr_weight_setting:**Setting weight for queues**** (FEX-101)**

```
May 20 06:43:18.232: HQM: hulc_fex_qos_srr_weight_setting: hulc_fex_qos_srr_weight_setting:
subopcode=2 startport=0 endport=0 size=4 (FEX-101)
May 20 06:43:18.232: HQM: hulc_fex_qos_srr_weight_setting: hulc_fex_qos_srr_weight_setting:
QueueNum=1 RRType=0 WeightRelative=0 WeightAbsolute=0 (FEX-101)
 20 06:43:18.232: HQM: hulc_fex_qos_srr_weight_setting: hulc_fex_qos_srr_weight_setting:
ratio is 0 for queue 1 (FEX-101)
May 20 06:43:18.232: HQM: hulc_fex_qos_srr_weight_setting: hulc_fex_qos_srr_weight_setting:
QueueNum=2 RRType=0 WeightRelative=33 WeightAbsolute=0 (FEX-101)
<snip>
```

20 06:43:19.110: HQM: hulc_fex_qos_buffer_conf: **Setting buffer for output queues (FEX-101)**

```
May 20 06:43:19.110: HQM: hulc_fex_qos_buffer_conf: hulc_fex_qos_buffer_conf:
subopcode=2 startport=0 endport=0 size=4 (FEX-101)
May 20 06:43:19.110: HQM: hulc_fex_qos_buffer_conf: hulc_fex_qos_buffer_conf:
queuenum=1 size=15 (FEX-101)
May 20 06:43:19.110: HQM: hulc_fex_qos_buffer_conf:
hulc_fex_qos_buffer_conf: queuenum=2 size=25 (FEX-101)
May 20 06:43:19.110: HQM: hulc_fex_qos_buffer_conf:
hulc_fex_qos_buffer_conf: queuenum=3 size=40 (FEX-101)
May 20 06:43:19.110: HQM: hulc_fex_qos_buffer_conf:
hulc_fex_qos_buffer_conf: queuenum=4 size=20 (FEX-101)
May 20 06:43:19.110: HQM: hqm
 20 06:43:19.113: HQM: s88g_qd_get_queue_threshold: s88g_qd_get_queue_threshold:
max_limit = 3200, set to 350. (FEX-101)
May 20 06:43:19.113: HQM: s88g_qd_get_queue_threshold: s88g_qd_get_queue_threshold:
max_limit = 3200, set to 350. (FEX-101)
<snip>
```

hulc_fex_qos_qthresh_map:**Setting dscp to output queue map**** (FEX-101)**

```
May 20 06:43:19.169: HQM: hulc_fex_qos_qthresh_map: hulc_fex_qos_qthresh_map:
subopcode=2 startport=0 endport=0 size=1 (FEX-101)
May 20 06:43:19.169: HQM: hulc_fex_qos_qthresh_map: hulc_fex_qos_qthresh_map: DscpBma
 20 06:43:19.169: HQM: hulc_fex_qos_qthresh_map: hulc_fex_qos_qthresh_map
dscp=32 iterator=0 (FEX-101)
May 20 06:43:19.169: HQM: hulc_fex_qos_qthresh_map: hulc_fex_qos_qthresh_map
dscp=33 iterator=1 (FEX-101)
May 20 06:43:19.169: HQM: hulc_fex_qos_qthresh_map: hulc_fex_qos_qthresh_map
dscp=40 iterator=2 (FEX-101)
<snip>
```