

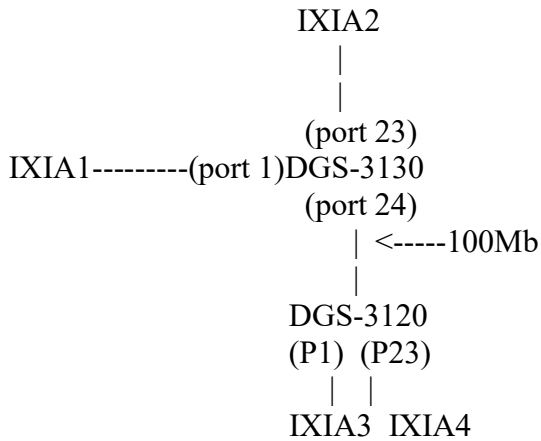
[Scenario]

Two traffic flows are transmitted in the same queue, causing congestion.

After applying the QoS policy, two traffic flows transmit in a different queues, so it can receive more IPTV stream packets.

Please check the following,

[Topology]



[Solution]

[Configuration]

```
#DGS-3130
line console
session-timeout 0
exit
ip access-list proxy 1999
10 permit 1.1.1.0 0.0.0.255 any
exit
class-map match-any proxy
match access-group name proxy
exit
policy-map proxy
class proxy
set cos 5
set dscp 46
exit
exit
interface ethernet 1/0/24
speed 100
exit
```

[Test Steps & Results]

1. IXIA1, IXIA3 inject the packet with MAX. rate.
2. IXIA2 inject the stream to IXIA4 as attached. (Note: the MAC should be different)
3. Check the traffic flow.

```
Switch#show interfaces utilization
```

Port	TX packets/sec	RX packets/sec	Utilization
eth1/0/1	160585	1504704	42
eth1/0/2	0	0	0
eth1/0/3	0	0	0
eth1/0/4	0	0	0
eth1/0/5	0	0	0
eth1/0/6	0	0	0
eth1/0/7	0	0	0
eth1/0/8	0	0	0
eth1/0/9	0	0	0
eth1/0/10	0	0	0
eth1/0/11	0	0	0
eth1/0/12	0	0	0
eth1/0/13	0	0	0
eth1/0/14	0	0	0
eth1/0/15	0	0	0
eth1/0/16	0	0	0
eth1/0/17	0	0	0
eth1/0/18	0	0	0
eth1/0/19	0	0	0
eth1/0/20	0	0	0
eth1/0/21	0	0	0
eth1/0/22	0	0	0
eth1/0/23	0	10374	0
eth1/0/24	154387	154380	79
eth1/0/25	0	0	0
eth1/0/26	0	0	0
eth1/0/27	0	0	0
eth1/0/28	0	0	0
eth1/0/29	0	0	0
eth1/0/30	0	0	0

Total Entries: 30

```
DGS-3120-24TC:admin#show utilization ports
Command: show utilization ports
```

Port	TX/sec	RX/sec	Util	Port	TX/sec	RX/sec	Util
1:1	148731	1487211	55	1:21	0	0	0
1:2	0	0	0	1:22	0	0	0
1:3	0	0	0	1:23	620	0	1
1:4	0	0	0	1:24	148724	148731	100
1:5	0	0	0				
1:6	0	0	0				
1:7	0	0	0				
1:8	0	0	0				
1:9	0	0	0				
1:10	0	0	0				
1:11	0	0	0				
1:12	0	0	0				
1:13	0	0	0				
1:14	0	0	0				
1:15	0	0	0				
1:16	0	0	0				
1:17	0	0	0				
1:18	0	0	0				
1:19	0	0	0				
1:20	0	0	0				

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==>As you can see the port 23 of DGS-3120 just receive 620 packets/second.

4. Apply the QoS policy to port 23 of DGS-3130

```
Switch(config)#interface ethernet 1/0/23
Switch(config-if)#service-policy input proxy
Switch(config-if)#end
Switch#show interfaces utilization
```

Port	TX packets/sec	RX packets/sec	Utilization
eth1/0/1	160532	1504212	42
eth1/0/2	0	0	0
eth1/0/3	0	0	0
eth1/0/4	0	0	0
eth1/0/5	0	0	0
eth1/0/6	0	0	0
eth1/0/7	0	0	0
eth1/0/8	0	0	0
eth1/0/9	0	0	0
eth1/0/10	0	0	0
eth1/0/11	0	0	0
eth1/0/12	0	0	0
eth1/0/13	0	0	0
eth1/0/14	0	0	0
eth1/0/15	0	0	0
eth1/0/16	0	0	0
eth1/0/17	0	0	0
eth1/0/18	0	0	0
eth1/0/19	0	0	0
eth1/0/20	0	0	0
eth1/0/21	0	0	0
eth1/0/22	0	0	0
eth1/0/23	0	10191	0
eth1/0/24	151666	151659	77
eth1/0/25	0	0	0
eth1/0/26	0	0	0
eth1/0/27	0	0	0
eth1/0/28	0	0	0
eth1/0/29	0	0	0
eth1/0/30	0	0	0

Total Entries: 30

```
DGS-3120-24TC:admin#show utilization ports
Command: show utilization ports
```

Port	TX/sec	RX/sec	Util	Port	TX/sec	RX/sec	Util
1:1	148289	1482787	55	1:21	0	0	0
1:2	0	0	0	1:22	0	0	0
1:3	0	0	0	1:23	9964	0	1
1:4	0	0	0	1:24	148281	148289	100
1:5	0	0	0				
1:6	0	0	0				
1:7	0	0	0				
1:8	0	0	0				
1:9	0	0	0				
1:10	0	0	0				
1:11	0	0	0				
1:12	0	0	0				
1:13	0	0	0				
1:14	0	0	0				
1:15	0	0	0				
1:16	0	0	0				
1:17	0	0	0				
1:18	0	0	0				
1:19	0	0	0				
1:20	0	0	0				

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==>As you can see the port 23 of DGS-3120 received packets more.

5. Verify the wrr setting,

```
Switch#show mls qos interface ethernet 1/0/24 scheduler
Interface      Scheduler Method
-----
eth1/0/24      wrr

Switch#show mls qos queueing interface ethernet 1/0/24
Interface: eth1/0/24
wrr bandwidth weights:
  QID  weights
  ---  -
  0    1
  1    1
  2    1
  3    1
  4    1
  5    1
  6    1
  7    0
wrrr bandwidth weights:
  QID  Quantum
  ---  -
  0    1
  1    1
  2    1
  3    1
  4    1
  5    1
  6    1
  7    1
```