Egress Multicast Buffer

Effective with Cisco NX-OS Release 7.2(0)N1(1), the Cisco Nexus 5600 and 6000 series switches support egress multicast buffer tuning.

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Information About Egress Multicast Buffering

The egress multicast buffer allows additional cells to enhance multicast traffic at egress. When there is heavy multicast traffic, buffer space (cells) is borrowed from the unicast pool. The pool provides a specific number of cells to enhance the burst absorption and minimize traffic drops at egress.

Note The egress multicast buffering feature is enabled only in multicast heavy traffic environment. Also, there is a set limit for the multicast pool size (the number of cells that can be borrowed).

You can configure multicast traffic buffering when the traffic patten in your environment has:

- Multicast traffic counts 90 to 99 percent
- Multicast traffic is inconsistent

Configuring Egress Multicast Buffer Tuning

Procedure

	Command or Action	Purpose
Step 1	switch# **configure terminal**	Enters global configuration mode.
Step 2	switch(config)# **hardware multicast-buffer-tune**	Tunes the egress multicast buffer size to have more burst absorption.

Example

The following example shows how the egress multicast buffer size is tuned to have more burst absorption.

```
switch# configure terminal
switch(config)# hardware multicast-buffer-tune
```

Verifying Egress Multicast Buffering

To verify the egress multicast buffering, use the following command:

Command	Purpose
switch# **show platform software qd info**	Displays the status of the multicast buffer enable feature, the allocated space for egress buffer, and number of cells in unicast and multicast pool in 40G and 10G fabric modes.

The following example shows how to verify cells values in unicast and multicast pool before enabling the egress multicast buffer command.

```
Switch# show platform software qd info

Multicast buffer enable feature is : Disabled //verifying unicast
and multicast cell values when multicast
buffer feature is disabled//

Egress buffer allocation
Fabric mode : 40G Fabric Mode
      10G Port                          40G Port
pool| total| xoff|  xon| xcos| cls|   total| xoff|  xon| xcos| cls
uc 0|   100|   60|   30|    0|  00|     100|   60|   30|    0|  00
uc 1|     0|    0|    0|    0|  00|       0|    0|    0|    0|  00
uc 2|     0|    0|    0|    0|  00|       0|    0|    0|    0|  00
uc 3|  1035|  700|   16|  350|  fe|    1934| 1512|   64| 1112|  fe
mc 0| 13292|    0|    0|  -  |  ff|   20666|    0|    0|  -  |  ff
mc 1|     0|    0|    0|  -  |  00|       0|    0|    0|  -  |  00
```

The following example shows how to verify cell values in unicast and multicast pool after enabling the egress multicast buffer command:

```
Switch# show platform software qd info

Multicast buffer enable feature is : Enabled //verifying unicast and
multicast cell values when multicast
buffer feature is enabled//

Egress buffer allocation
Fabric mode : 40G Fabric Mode
      10G Port                          40G Port
pool| total| xoff|  xon| xcos| cls|   total| xoff|  xon| xcos| cls
uc 0|   100|   60|   30|    0|  00|     100|   60|   30|    0|  00
uc 1|     0|    0|    0|    0|  00|       0|    0|    0|    0|  00
```

```
uc 2|     0|    0|    0|    0|  00|       0|    0|    0|    0|  00
uc 3|   451|  116|   16|   87|  fe|     586|  164|   64|  123|  fe
mc 0| 20300|    0|    0|  -  |  ff|   24710|    0|    0|  -  |  ff
mc 1|     0|    0|    0|  -  |  00|       0|    0|    0|  -  |  00
```