目录

简介

本文目的将显示如何修改在思科连结7000 (N7k)思科连结7000 48波尔特1的入口缓冲区和万兆以太网F2-Series模块(F2)和思科连结7000增强版F2-Series 48波尔特光纤1和万兆以太网虚拟通道的3 (VL3)模块(F2e)线路卡。

并且，您看到相当数量入口您为VL3获取以后的缓冲能力正在修改这些值。

问题

使用在以太网(FCoE)多跳跃连接的光纤通道在距离的Datacenters之间了不起的比2公里能导致输入丢弃。默认情况下， F2/F2e线路卡有0页在排队数据包的延迟缓冲区在暂停以后发送，并且这将导致在长途FCoE多跳跃接口的输入丢弃。

延迟缓冲区定义如下：

PL_STOP - HWM (PL_Pause) = LB (延迟缓冲区)

您注意以上提到的值显示作为页。每个页是大致384个字节。

公告下面， VL3入口缓冲区缓冲能力与默认FCoE QoS策略的：

EX

```
module-10# show hardware internal mac port 1 qos configuration | begin IB | end EB  IB    Port
page limit : 3584 (1376256 Bytes)    VL#  HWM pages(bytes)  LWM pages(bytes) Used PL_STOP(HWM &
LWM) SPAN                                          pages                    THR     0    1107
(  425088)   1035 (  397440)     0     1107   1035    100     1       2 (     768)      1 (
384)     0        2      1      1     2       2 (     768)      1 (     384)     0        2
1      1     3    1053 (  404352)   1029 (  395136)     0     1053   1029    100     4    1107 (
425088)   1083 (  415872)     0     1107   1083    100     5     231 (   88704)    159 (
61056)     0      231    159     57     6       2 (     768)      1 (     384)     0        2
1      1     7       2 (     768)      1 (     384)     0        2      1      1    Credited
DWRR WT: 216 (0xd8) Uncredited DWRR WT: 144 (0x90)    DWRR honor UC = FALSE     Leak Lo weight =
0xd8, enabled = FALSE  EB
```

PL_STOP和高水位标记(HWM)有价值。您能看到默认情况下延迟缓冲区有0页。支持将需要修改这些值的长途FCoE。

解决方案

首先您将需要复制'default-4q-7e-in-policy服务质量(QoS)策略映射：

```
module-10# show hardware internal mac port 1 qos configuration | begin IB | end EB  IB    Port
page limit : 3584 (1376256 Bytes)    VL#  HWM pages(bytes)  LWM pages(bytes) Used PL_STOP(HWM &
LWM) SPAN                                              pages                    THR     0    1107
(  425088)   1035 (  397440)     0     1107   1035    100     1       2 (     768)      1 (
384)     0        2      1      1     2       2 (     768)      1 (     384)     0        2
1      1     3    1053 (  404352)   1029 (  395136)     0     1053   1029    100     4    1107 (
425088)   1083 (  415872)     0     1107   1083    100     5     231 (   88704)    159 (
61056)     0      231    159     57     6       2 (     768)      1 (     384)     0        2
1      1     7       2 (     768)      1 (     384)     0        2      1      1    Credited
DWRR WT: 216 (0xd8) Uncredited DWRR WT: 144 (0x90)    DWRR honor UC = FALSE     Leak Lo weight =
0xd8, enabled = FALSE  EB
```

在您之下将看到相当数量字节分配到VL3延迟缓冲区，以后正在修改服务策略。

注意：您将看不到延迟缓冲区，直到您分配队列极限的至少60%对“ndrop”策略的。

策略将被修改增量10， 99%

```
60/40 ingess buffer allocation==============================policy-map type queuing 7I_4q-7e-in
class type queuing c-4q-7e-drop-in    service-policy type queuing 7I_4q-7e-drop-in    queue-
limit percent 40  class type queuing c-4q-7e-ndrop-in    service-policy type queuing 7I_4q-7e-
ndrop-in    queue-limit percent 60interface Ethernet2/5  service-policy type queuing input
7I_4q-7e-inmodule-2# show hardware internal mac port 5 qos configuration | begin IB | end EB  IB
Port page limit : 3584 (1376256 Bytes)    VL#  HWM pages(bytes)  LWM pages(bytes) Used
PL_STOP(HWM & LWM) SPAN                                              pages                    THR
0     624 (  239616)    576 (  221184)     0      624    576    100     1       2 (     768)
1 (     384)     0        2      1      1     2     624 (  239616)    576 (  221184)     0
624    576    100     3    1913 (  734592)   1889 (  725376)     0     2126   1889    100     4
2 (     768)      1 (     384)     0        2      1      1     5     124 (   47616)     52 (
19968)     0      124     52     31     6       2 (     768)      1 (     384)     0        2
1      1     7       2 (     768)      1 (     384)     0        2      1      1    Credited
DWRR WT: 216 (0xd8) Uncredited DWRR WT: 144 (0x90)     DWRR honor UC = FALSE     Leak Lo weight
= 0xd8, enabled = FALSE  EB
```

60/40将分配81792个字节到vl3延迟缓冲区。

PL_STOP - HWM * 384个字节
2126个- 1913年= 213pages * 384个= 81792个字节

```
70/30 ingress buffer allocation==============================policy-map type queuing 7I_4q-7e-
in  class type queuing c-4q-7e-drop-in    service-policy type queuing 7I_4q-7e-drop-in    queue-
limit percent 30  class type queuing c-4q-7e-ndrop-in    service-policy type queuing 7I_4q-7e-
ndrop-in    queue-limit percent 70interface Ethernet2/5  service-policy type queuing input
7I_4q-7e-inmodule-2# show hardware internal mac port 5 qos configuration | begin IB | end EB  IB
Port page limit : 3584 (1376256 Bytes)    VL#  HWM pages(bytes)  LWM pages(bytes) Used
PL_STOP(HWM & LWM) SPAN                                              pages                    THR
0     463 (  177792)    415 (  159360)     0      463    415    100     1       2 (     768)
1 (     384)     0        2      1      1     2     463 (  177792)    415 (  159360)     0
463    415    100     3    1987 (  763008)   1963 (  753792)     0     2484   1963    100     4
2 (     768)      1 (     384)     0        2      1      1     5      88 (   33792)     16 (
6144)     0       88     16     22     6       2 (     768)      1 (     384)     0        2
1      1     7       2 (     768)      1 (     384)     0        2      1      1    Credited
DWRR WT: 216 (0xd8) Uncredited DWRR WT: 144 (0x90)     DWRR honor UC = FALSE     Leak Lo weight
= 0xd8, enabled = FALSE  EB
```

70/30分配190848个字节到VL3延迟缓冲区。

```
policy-map type queuing 7I_4q-7e-in  class type queuing c-4q-7e-drop-in    service-policy type
queuing 7I_4q-7e-drop-in    queue-limit percent 20  class type queuing c-4q-7e-ndrop-in
service-policy type queuing 7I_4q-7e-ndrop-in    queue-limit percent 80interface Ethernet2/5
service-policy type queuing input 7I_4q-7e-inmodule-2# show hardware internal mac port 5 qos
configuration | begin IB | end EB  IB    Port page limit : 3584 (1376256 Bytes)    VL#  HWM
```

```
pages(bytes)  LWM pages(bytes) Used PL_STOP(HWM & LWM) SPAN
pages                    THR     0     302 (  115968)    254 (   97536)     0      302    254
75     1       2 (     768)      1 (     384)     0        2      1      1     2     302 (
115968)    254 (   97536)     0      302    254     75     3    1875 (  720000)   1851 (
710784)     0     2841   1851    100     4       2 (     768)      1 (     384)     0        2
1      1     5      52 (   19968)     46 (   17664)     0       52     46     13     6       2 (
768)      1 (     384)     0        2      1      1     7       2 (     768)      1 (     384)
0        2      1      1    Credited DWRR WT: 216 (0xd8) Uncredited DWRR WT: 144 (0x90)     DWRR
honor UC = FALSE     Leak Lo weight = 0xd8, enabled = FALSE  EB
```

80/20分配370944个字节到VL3延迟缓冲区。

```
policy-map type queuing 7I_4q-7e-in  class type queuing c-4q-7e-drop-in    service-policy type
queuing 7I_4q-7e-drop-in    queue-limit percent 10  class type queuing c-4q-7e-ndrop-in
service-policy type queuing 7I_4q-7e-ndrop-in    queue-limit percent 90interface Ethernet2/5
service-policy type queuing input 7I_4q-7e-inmodule-2# show hardware internal mac port 5 qos
configuration | begin IB | end EB  IB    Port page limit : 3584 (1376256 Bytes)    VL#  HWM
pages(bytes)  LWM pages(bytes) Used PL_STOP(HWM & LWM) SPAN
pages                    THR     0     141 (   54144)     93 (   35712)     0      141     93
35     1       2 (     768)      1 (     384)     0        2      1      1     2     141 (
54144)     93 (   35712)     0      141     93     35     3    1055 (  405120)   1031 (  395904)
0     3199   1031    100     4       2 (     768)      1 (     384)     0        2      1      1
5      16 (    6144)     10 (    3840)     0       16     10      4     6       2 (     768)
1 (     384)     0        2      1      1     7       2 (     768)      1 (     384)     0
2      1      1    Credited DWRR WT: 216 (0xd8) Uncredited DWRR WT: 144 (0x90)     DWRR honor UC
= FALSE     Leak Lo weight = 0xd8, enabled = FALSE  EB
```

90/10分配823296个字节到VL3延迟缓冲区

```
policy-map type queuing 7I_4q-7e-in  class type queuing c-4q-7e-drop-in    service-policy type
queuing 7I_4q-7e-drop-in    queue-limit percent 10  class type queuing c-4q-7e-ndrop-in
service-policy type queuing 7I_4q-7e-ndrop-in    queue-limit percent 90interface Ethernet2/5
service-policy type queuing input 7I_4q-7e-inmodule-2# show hardware internal mac port 5 qos
configuration | begin IB | end EB  IB    Port page limit : 3584 (1376256 Bytes)    VL#  HWM
pages(bytes)  LWM pages(bytes) Used PL_STOP(HWM & LWM) SPAN
pages                    THR     0     141 (   54144)     93 (   35712)     0      141     93
35     1       2 (     768)      1 (     384)     0        2      1      1     2     141 (
54144)     93 (   35712)     0      141     93     35     3    1055 (  405120)   1031 (  395904)
0     3199   1031    100     4       2 (     768)      1 (     384)     0        2      1      1
5      16 (    6144)     10 (    3840)     0       16     10      4     6       2 (     768)
1 (     384)     0        2      1      1     7       2 (     768)      1 (     384)     0
2      1      1    Credited DWRR WT: 216 (0xd8) Uncredited DWRR WT: 144 (0x90)     DWRR honor UC
= FALSE     Leak Lo weight = 0xd8, enabled = FALSE  EB
```

99/1分配906240个字节到VL3延迟缓冲区

注意：每飞剪机asic有缓冲能力6MB。有每架飞剪机4个端口，因此这等同于对~1.5MB缓冲能力每个端口。使用99/1您看到~.9MB分配到VL3延迟缓冲区，并且HWM使用剩余每个VL (对VL3的多数)。当添加与VL3 LB的每VLs HWM您将看到时等同于对~1.35MB缓冲能力。