

S3610/5510交换机CPU利用率高时收集信息的方法

一、 组网：

无

二、 问题描述：

在S3610/5510交换机使用过程中，通过“display cpu”命令观察到CPU利用率较高。

三、 过程分析：

导致CPU利用率高的原因大致可分为两种，分别是上CPU处理的报文过多或MAC地址学习数量多。

四、 解决方法：

具体信息的收集方法详述如下：

[H3C]_ //进入隐含模式

Now you enter a hidden command view for developer's testing, some commands may affect operation by wrong use, please carefully use it with our engineer's direction.

[H3C-hidecmd]_dis drv rxtx interrupt ?

INTEGER<0-1119> rxtx module: Interrupt index.
all all interrupt information

[H3C-hidecmd]_dis drv rxtx interrupt all //查看当前设备中断使用情况

Display all Interrupt information.
Interrupt 578 RX_BUFFER_QUEUE0 total num 29
Interrupt 583 RX_BUFFER_QUEUE5 total num 236
Interrupt 615 TX_BUFFER_QUEUE6 total num 236
Interrupt 631 TX_END_QUEUE6 total num 236
Interrupt Queue 0 total num 265
Interrupt Queue 5 total num 236
Interrupt Queue 7 total num 236

[H3C-hidecmd]_dis drv rxtx statistics //查看当前报文收发统计信息

CPU TxQue	Packets sent	Packets sent end	Free desc num dev0
0,	0,	0,	2
1,	0,	0,	2
2,	0,	0,	2
3,	0,	0,	2
4,	0,	0,	2
5,	0,	0,	2
6,	2995,	2995,	506
7,	0,	0,	506

CPU RxQue	Packets received	Packets sent to top stack
0,	392,	392
1,	0,	0
2,	0,	0
3,	0,	0
4,	0,	0
5,	2981,	2981
6,	0,	0
7,	0,	0

Total received packets 3373, Total received bytes 316405
Total sent packets 2995, Total sent bytes 317786
Total sent end packets 2995, sent end error packets 0
Sent not found error 0
Sent DMA error 0
Sent Desc error 0

***** Device 0 *****

SDMA Conf 0x8c0000f9
Rcv SDMA Queue Enable Mask(Q7-Q0): 0xff
Rcv SDMA Queue Disable Mask(Q7-Q0): 0x0
Rcv SDMA Queue Pending Mask(Q7-Q0): 0xff
Rcv SDMA Pcks Count (Q0-

```
Q7):4035451742,996153810,425970143,1223111663,3538234506
,4201350763,411883747,2622651042
Rcv SDMA Error Count:Q0:0 Q1:0 Q2:0 Q3:0 Q4:0 Q5:0 Q6:0 Q7:0
Rcv SDMA Rx Int caused by Receive Pkt.Mask(Q7-Q0): 0x0
Rcv SDMA Rx Int caused by Resource Error.Mask(Q7-Q0): 0x0
Xmt SDMA Que Enable Mask(Q7-Q0):0x0
Xmt SDMA Que Disable Mask(Q7-Q0):0x0
Xmt SDMA Tx Int caused by Snd Pkt.Mask(Q7-Q0):0x0
Xmt SDMA Tx Int caused by Resource Error.Mask(Q7-Q0):0x0
[H3C-hidecmd]
[H3C-hidecmd]
[H3C-hidecmd]_clear drv rxtx ? //通过如下两条命令可以清空当前的中断统计信息
interrupt rxtx module: Interrupt statistics
statistics rxtx module: rxtx statistics information
//之后再通过“_dis drv rxtx interrupt all”和“_dis drv rxtx statistics”命令收集这段时间的统计信息。
<H3C> //回到用户视图下，通过debug命令收集上CPU处理的报文。
<H3C>debug drv rxtx ?
all rxtx module: Set all debugging switch
error rxtx module: Status. Driver functions return value check
packet rxtx module: Packet information
trace rxtx module: Event. Interface information between driver and uplayer
verbose rxtx module: Detail information of interface between driver and
uplayer
<H3C>debug drv rxtx pa
<H3C>debug drv rxtx packet ?
length length of packet to show, default value = 64 bytes
receive rxtx module: receive packet
send rxtx module: send packet
<H3C>debug drv rxtx packet receive ?
code rxtx module: cpu code
offset packet offset to debugging, (count in bytes,start from 0)
port rxtx module: from port
queue rxtx module: cpu queue
<cr>
<H3C>debug drv rxtx packet receive //收集接收到的报文信息。
Debugging rxtx packet receive from all ports is on!
<H3C> t d
<H3C>t m
//通过“undo debug all”或“u t d”关闭debug开关（只能输入命令没有快捷键）
```