

知

某局点S6820-4C设备突然大量BGP邻居异常中断问题

BGP

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组网及说明

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问题描述

在15日03:03开始突然BGP邻居几乎全down，伴随着subslot 4子卡的部分聚合成员端口协议down，无法选中。随后客户立刻对设备配置了peer xxx ignore隔离设备规避，期间业务影响较小。

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%Jun 15 03:03:22:311 2022 BJS20_F0103_C01_021_T1_1.80 BGP/5/BGP_STATE_CHANGE:
BGP.: 100.125.49.130 state has changed from ESTABLISHED to IDLE for a notification received: Hold Timer Expired/ErrSubCode Unspecified.
%Jun 15 03:03:24:477 2022 BJS20_F0103_C01_021_T1_1.80 BGP/5/BGP_STATE_CHANGE:
BGP.: 100.125.49.131 state has changed from ESTABLISHED to IDLE for a notification received: Hold Timer Expired/ErrSubCode Unspecified.
%Jun 15 03:03:26:345 2022 BJS20_F0103_C01_021_T1_1.80 BGP/5/BGP_STATE_CHANGE:
BGP.: 100.125.49.132 state has changed from ESTABLISHED to IDLE for a notification received: Hold Timer Expired/ErrSubCode Unspecified.
%Jun 15 03:03:27:073 2022 BJS20_F0103_C01_021_T1_1.80 BGP/5/BGP_STATE_CHANGE:
BGP.: 100.125.64.161 state has changed from ESTABLISHED to IDLE for a notification received: Hold Timer Expired/ErrSubCode Unspecified.
%Jun 15 03:03:27:314 2022 BJS20_F0103_C01_021_T1_1.80 BGP/5/BGP_STATE_CHANGE:
BGP.: 100.125.48.36 state has changed from ESTABLISHED to IDLE for a notification received: Hold Timer Expired/ErrSubCode Unspecified.
%Jun 15 03:03:27:528 2022 BJS20_F0103_C01_021_T1_1.80 BGP/5/BGP_STATE_CHANGE:
BGP.: 100.125.48.40 state has changed from ESTABLISHED to IDLE for a notification received: Hold Timer Expired/ErrSubCode Unspecified.
%Jun 15 03:03:28:428 2022 BJS20_F0103_C01_021_T1_1.80 BGP/5/BGP_STATE_CHANGE:
BGP.: 100.125.48.44 state has changed from ESTABLISHED to IDLE for a notification received: Hold Timer Expired/ErrSubCode Unspecified.
%Jun 15 03:03:28:465 2022 BJS20_F0103_C01_021_T1_1.80 BGP/5/BGP_STATE_CHANGE:
BGP.: 100.125.48.32 state has changed from ESTABLISHED to IDLE for a notification received: Hold Timer Expired/ErrSubCode Unspecified.
%Jun 15 03:03:28:883 2022 BJS20_F0103_C01_021_T1_1.80 BGP/5/BGP_STATE_CHANGE:
BGP.: 100.125.48.56 state has changed from ESTABLISHED to IDLE for a notification received: Hold Timer Expired/ErrSubCode Unspecified.
%Jun 15 03:03:28:983 2022 BJS20_F0103_C01_021_T1_1.80 BGP/5/BGP_STATE_CHANGE:
BGP.: 100.125.48.54 state has changed from ESTABLISHED to IDLE for a notification received: Hold Timer Expired/ErrSubCode Unspecified.
%Jun 15 03:03:29:280 2022 BJS20_F0103_C01_021_T1_1.80 BGP/5/BGP_STATE_CHANGE:
BGP.: 100.125.48.58 state has changed from ESTABLISHED to IDLE for a notification received: Hold Timer Expired/ErrSubCode Unspecified.
%Jun 15 03:03:29:460 2022 BJS20_F0103_C01_021_T1_1.80 BGP/5/BGP_STATE_CHANGE:
BGP.: 100.125.48.50 state has changed from ESTABLISHED to IDLE for a notification received: Hold Timer Expired/ErrSubCode Unspecified.
%Jun 15 03:03:29:622 2022 BJS20_F0103_C01_021_T1_1.80 BGP/5/BGP_STATE_CHANGE:
BGP.: 100.125.48.62 state has changed from ESTABLISHED to IDLE for a notification received: Hold Timer Expired/ErrSubCode Unspecified.
%Jun 15 03:03:29:642 2022 BJS20_F0103_C01_021_T1_1.80 BGP/5/BGP_STATE_CHANGE:
BGP.: 100.125.48.52 state has changed from ESTABLISHED to IDLE for a notification received: Hold Timer Expired/ErrSubCode Unspecified.
%Jun 15 03:03:30:666 2022 BJS20_F0103_C01_021_T1_1.80 BGP/5/BGP_STATE_CHANGE:
BGP.: 100.125.48.52 state has changed from ESTABLISHED to IDLE for a notification received: Hold Timer Expired/ErrSubCode Unspecified.
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解决方法
Terminator: type=0, len=0
1、设备多bit parity error，需要重启恢复。
* Jun 15 04:07:29.732 2022 BJS20_F0103_C01_021_T1_1.80 LAGG7/Packet_PACKET.Hu
2、重启后观察是否还有FCE计数，以及DROP丢包，观察subslot是否还会发生震荡
ndred GigE port C-end，说明转发芯片存在异常，建议更换设备。
size=110, subtype=1, version=1
Actor: type=1, len=20, sys-pri=0x8000, sys-mac=9ce8-95e1-cef2, key=0x1, pri=0x8000, po
rt-index=0x3, state=0xd
Partner: type=2, len=20, sys-pri=0x8000, sys-mac=c433-064a-4401, key=0xd351, pri=0x80
00, port-index=0x39, state=0x45
Collector: type=3, len=16, col-max-delay=0x0
Terminator: type=0, len=0
```

3.查看底层local logbuffer信息，发现设备有多bit parity error，有MMU相关的parity，时间点也和故障时间吻合；

```
Slot01 Jun 15 2022 03:03:12:413:LINE:5315-TASK:bDPC-FUNC:soc_ser_correction:SER
CORRECTION: reg/mem:1291 btype:19 sblk:2 at:-1 stage:1 addr:0x04300000 port: 0 inde
x: 2032
Slot01 Jun 15 2022 03:03:12:413:LINE:5427-TASK:bDPC-
FUNC:soc_ser_correction:mem: 1291=EGR_MAP_MH blkoffset:35
Slot01 Jun 15 2022 03:03:12:413:LINE:5797-TASK:bDPC-FUNC:soc_ser_correction:CAC
HE_RESTORE: EGR_MAP_MH[1291] blk: epipe0 index: 2032 : [2][4300000]
Slot01 Jun 15 2022 03:03:12:427:LINE:1140-TASK:bRX1-FUNC:DRV_QINQ_GetState:ifind
ex 13 info get return 0x40010008
Slot01 Jun 15 2022 03:03:12:437:LINE:5116-TASK:bDPC-FUNC:soc_tomahawk_process_
ser_fifo:Multiple:
Slot01 Jun 15 2022 03:03:12:447:LINE:5112-TASK:bDPC-FUNC:soc_tomahawk_process_
ser_fifo:Unit: 0
Slot01 Jun 15 2022 03:03:12:448:LINE:5125-TASK:bDPC-FUNC:soc_tomahawk_process_
ser_fifo:Mem:
Slot01 Jun 15 2022 03:03:12:448:LINE:5131-TASK:bDPC-FUNC:soc_tomahawk_process_
ser_fifo:Parity error..
Slot01 Jun 15 2022 03:03:12:448:LINE:4770-TASK:bDPC-FUNC:_soc_tomahawk_print_se
r_fifo_details>Error in: SOP cell.
Slot01 Jun 15 2022 03:03:12:448:LINE:4801-TASK:bDPC-FUNC:_soc_tomahawk_print_se
r_fifo_details:Blk: 2, Pipe: 2, Address: 0x043007f0, base: 0xc, stage: 1, index: 2032
Slot01 Jun 15 2022 03:03:12:448:LINE:4829-TASK:bDPC-FUNC:_soc_tomahawk_print_se
r_fifo_details:SER caused packet drop.
Slot01 Jun 15 2022 03:03:12:448:LINE:5315-TASK:bDPC-FUNC:soc_ser_correction:SER
CORRECTION: reg/mem:1291 btype:19 sblk:2 at:-1 stage:1 addr:0x04300000 port: 0 inde
x: 2032
Slot01 Jun 15 2022 03:03:12:448:LINE:5427-TASK:bDPC-
FUNC:soc_ser_correction:mem: 1291=EGR_MAP_MH blkoffset:35
Slot01 Jun 15 2022 03:03:12:448:LINE:5797-TASK:bDPC-FUNC:soc_ser_correction:CAC
HE_RESTORE: EGR_MAP_MH[1291] blk: epipe0 index: 2032 : [2][4300000]
Slot01 Jun 15 2022 03:03:12:451:LINE:1597-TASK:FMCK-FUNC:DRV_DEVM_GetSubSlot
FromUnitPort:call DRV_DEVM_GetUserPortFromUnitPort error: uiBID 1,uiUnit 0, uiPort 2
Slot01 Jun 15 2022 03:03:12:451:LINE:7477-TASK:FMCK-FUNC:DRV_DEVM_PortIsPhy82
391:DRV_DEVM_PortIsPhy82391 error invalid uiRet=1073807361
Slot01 Jun 15 2022 03:03:12:467:LINE:5112-TASK:bDPC-FUNC:soc_tomahawk_process_
ser_fifo:Unit: 0
Slot01 Jun 15 2022 03:03:12:467:LINE:5125-TASK:bDPC-FUNC:soc_tomahawk_process_
ser_fifo:Mem:
Slot01 Jun 15 2022 03:03:12:467:LINE:5131-TASK:bDPC-FUNC:soc_tomahawk_process_
ser_fifo:Parity error..
Slot01 Jun 15 2022 03:03:12:467:LINE:4770-TASK:bDPC-FUNC:_soc_tomahawk_print_se
r_fifo_details>Error in: SOP cell.
Slot01 Jun 15 2022 03:03:12:467:LINE:4801-TASK:bDPC-FUNC:_soc_tomahawk_print_se
r_fifo_details:Blk: 2, Pipe: 2, Address: 0x043007f0, base: 0xc, stage: 1, index: 2032
Slot01 Jun 15 2022 03:03:12:467:LINE:4829-TASK:bDPC-FUNC:_soc_tomahawk_print_se
r_fifo_details:SER caused packet drop.
Slot01 Jun 15 2022 03:03:12:467:LINE:5315-TASK:bDPC-FUNC:soc_ser_correction:SER
CORRECTION: reg/mem:1291 btype:19 sblk:2 at:-1 stage:1 addr:0x04300000 port: 0 inde
x: 2032
Slot01 Jun 15 2022 03:03:12:467:LINE:5427-TASK:bDPC-
```

