

知 某局点S6800 STP显示异常

STP 苏亚东 2022-06-09 发表

问题描述

现场有多台S6800，现在发现有组堆叠的6800存在stp显示异常。从手册里的回显来看，如果生成树未配置的情况下，查看display stp brief看的话也会是如下回显：

当生成树协议未开启时，在MSTP模式下显示生成树的状态和统计信息。

```
<Sysname> display stp
Protocol status   : Disabled
Protocol Std.    : IEEE 802.1s
Version          : 3
Bridge-Prio.     : 32768
MAC address      : 000f-e200-8048
Max age(s)       : 20
Forward delay(s) : 15
Hello time(s)    : 2
Max hops         : 20
TC Snooping      : Disabled
```

异常设备回显如下：

```
=====display stp brief=====
STP is not configured.
```

```
=====display stp=====
STP is not configured.
```

过程分析

(1) 通过Display process 没有stpd进程。

```
[H3C]dis process | in stp
 531   531 0.0 0.0 S 120 N   ttyS0 00:00:00 grep -E stp
```

(2) 进一步测试发现不同版本下设备处理机制不同，在设备未开启stp功能时，R2702设备启动时默认会启动stpd进程，而F2707之后的版本则不会启动：

R2702版本默认会启动stp进程

```
[H3C]dis cu | in stp
```

```
[H3C]
```

```
[H3C]
```

```
[H3C]dis process | in stp
 339   339 0.0 0.0 S 110 N   - 00:00:01
```

stpd

```
 510   510 0.0 0.0 S 120 N   ttyS0 00:00:00 grep -E
```

stp

```
[H3C]dis stp
```

```
Protocol status   : Disabled
Protocol Std.    : IEEE 802.1s
Version          : 3
Bridge-Prio.     : 32768
MAC address      : 50da-00eb-45ba
```

```
Max age(s)       : 20
Forward delay(s) : 15
Hello time(s)    : 2
Max hops         : 20
TC Snooping      : Disabled
```

```
[H3C]
```

F2707及之后版本默认不会启动stp进程，使能stp进程才会起来，现场是F2707版本，现象是正常的

```
[H3C]dis cu | in stp
```

```
[H3C]
```

```
[H3C]
```

```
[H3C]dis stp
STP is not configured.
```

```
[H3C]
```

```
[H3C]
```

```
[H3C]dis process | in stp
 531   531 0.0 0.0 S 120 N   ttyS0 00:00:00 grep -E
```

stp

```
[H3C]
```

```
[H3C]
```

```
[H3C]
```

```
[H3C]stp global enable
```

```
[H3C]%Jun 3 19:31:35:355 2011 H3C STP/6/STP_ENABLE: STP is now enabled on the device.
```

```
%Jun 3 19:31:36:734 2011 H3C STP/6/STP_DETECTED_TC: Instance 0's port FortyGig E1/0/49 detected a topology change.
```

```
[H3C]dis process | in stp
 532   532 3.9 0.0 S 110 N   - 00:00:03
```

stpd

```
 540   540 0.0 0.0 S 120 N   ttyS0 00:00:00 grep -E stp
```

```
[H3C]
```

```
[H3C]dis stp
```

```
-----[CIST Global Info][Mode MSTP]-----
```

```
Bridge ID       : 32768.50da-00eb-45ba
```

```
Bridge times    : Hello 2s MaxAge 20s FwdDelay 15s MaxHops
```

20

Root ID/ERPC : 32768.50da-00eb-45ba,

0

解决方法: Root ID/IRPC : 32768.50da-00eb-45ba, 0

因此, 综合以上排查, 可以确认现场stp显示异常并非故障。无需进行处理。

RootPort ID : 0.0

BPDU-Protection : Disabled

Bridge Config-

Digest-Snooping : Disabled

TC or TCN received : 2

Time since last TC : 0 days 0h:0m:9s

----[Port49(FortyGigE1/0/49)][FORWARDING]----

Port protocol : Enabled

Port role : Designated Port

Port ID : 128.49

Port cost(Legacy) : COnfig=auto,

Active=1

Desg.bridge/port : 32768.50da-00eb-45ba,

128.49

Port edged : COnfig=disabled,

Active=disabled

Point-to-Point : COnfig=auto,

Active=true

Transmit limit : 10 packets/hello-time

TC-Restriction : Disabled

Role-Restriction : Disabled

[H3C]

[H3C]undo stp global enable

[H3C]%Jun 3 19:31:58:757 2011 H3C STP/6/STP_DISABLE: STP is now disabled on the device.

[H3C]dis process | in stp

532 532 0.0 0.0 S 110 N - 00:00:04 stpd

547 547 0.0 0.0 S 120 N ttyS0 00:00:00 grep -E

stp

[H3C]dis stp

Protocol status : Disabled

Protocol Std. : IEEE 802.1s

Version : 3

Bridge-Prio. : 32768

MAC address : 50da-00eb-

45ba

Max age(s) : 20

Forward delay(s) : 15

Hello time(s) : 2

Max hops : 20

TC Snooping : Disabled

(3) 进一步确认, 部分设备启动后从来没有配置stp, 会显示not configured, 启动一次stp, 然后关掉, 才会显示Disabled。

