

# 某局点防火墙IRF接口down问题处理

IRF 电口 郑标 2020-03-23 发表

## 组网及说明

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## 问题描述

现场两台F1000-AK155设备做堆叠，业务运行期间发生了IRF堆叠分裂，大概3分钟后恢复，IRF主备发生了倒换。

```
%Mar 13 12:53:43:685 2020 H3C_01&02 STM/3/STM_LINK_DOWN: IRF port 1 went down.
```

```
%Mar 13 12:57:26:368 2020 H3C_01&02 STM/6/STM_LINK_UP: IRF port 1 came up.
```

客户有以下疑问：

为什么日志里面既有IRF接口down的记录，没有物理接口down的记录？

## 过程分析

一开始猜测是master slot1发生了整机重启，IRF主备切换导致物理口down的日志没有记录下来，但是看恢复后的诊断没有slot1异常重启的记录。

```
=====display kernel exception 10 verbose slot 1 =====
```

No information to display.

```
=====
```

```
=====display kernel reboot 20 verbose slot 1 =====
```

```
----- Reboot record 1 -----
```

```
Recorded at      : 2018-10-09 23:54:57.531224
```

```
Occurred at      : 2018-10-09 23:54:57.531224
```

进一步采集相关信息：

```
[H3C_01&02-probe]dis sys internal irf topodb
```

Topology information for IRF-port 1 side:

Number of members is 2 (including the current member)

```
Term Hop  IDX
```

```
0  0  0
```

```
1  1  1
```

Topology information for IRF-port 2 side:

Number of members is 1 (including the current member)

```
Term Hop  IDX
```

```
1  0  0
```

Detailed topology database info:

```
IDX Ref  Converg  CPUMAC      Bri-MAC      MemID Brds PS1 PS2
```

```
0  2  1    5cc9-9966-7b13 5cc9-9966-7b11 2  1  1  2
```

```
MPU CPUMAC      Bri-MAC      RunTime RoleStatus SlotID
```

```
0  5cc9-9966-7b13 5cc9-9966-7b11 23342 5  0
```

```
IDX Ref  Converg  CPUMAC      Bri-MAC      MemID Brds PS1 PS2
```

```
1  1  1    5cc9-9966-7af7 5cc9-9966-7af5 1  1  2  1
```

```
MPU CPUMAC      Bri-MAC      RunTime RoleStatus SlotID
```

```
0  5cc9-9966-7af7 5cc9-9966-7af5 40  4  0
```

```
[H3C_01&02-probe]dis hardware internal cpld reboot slot 1
```

### Last reboot reason: Cold reboot

从该显示信息可以看出，slot1设备是发生了掉电重启，所以不会有kernel记录，logbuffer也不会记录slot1 rebooting日志。

至于直接显示irf-port down不会显示对应堆叠物理口down，在实验室设备验证也是相同结果。

从日志中可以看出，当slot1恢复后，slot2对应的堆叠物理口也同时变up起来：

```
=====display irf cOnfiguration=====
```

```
MemberID NewID  IRF-Port1          IRF-Port2
```

```
1  1  disable          GigabitEthernet1/0/14
```

```
GigabitEthernet1/0/15
```

```
2  2  GigabitEthernet2/0/14  disable
```

```
GigabitEthernet2/0/15
```

```
=====
```

```
%Mar 13 12:57:26:368 2020 H3C_01&02 STM/6/STM_LINK_UP: IRF port 1 came up.
```

```
%Mar 13 12:57:26:370 2020 H3C_01&02 IFNET/3/PHY_UPDOWN: Physical state on the interface GigabitEthernet2/0/14 changed to up.
```

%Mar 13 12:57:26:370 2020 H3C\_01&02 IFNET/5/LINK\_UPDOWN: Line protocol state on the interface GigabitEthernet2/0/14 changed to up.

%Mar 13 12:57:36:463 2020 H3C\_01&02 IFNET/3/PHY\_UPDOWN: Physical state on the interface GigabitEthernet2/0/15 changed to up.

%Mar 13 12:57:36:463 2020 H3C\_01&02 IFNET/5/LINK\_UPDOWN: Line protocol state on the interface GigabitEthernet2/0/15 changed to up.

#### 解决方法

从已有诊断中看，没有任何异常栈的记录，同研发同事确认后，现场的bootware版本为2.0.0记录的重启类型可能存在误报。

此外，Cold reboot也有可能是上一次重启的记录，并不一定是故障时的记录。

[H3C\_01&02-probe]dis hardware internal cpld reboot slot 1

Last reboot reason: Cold reboot

目前无更好的信息判断主备倒换的具体原因，建议将bootware升级到2.0.3进行观察，同时将设备软件升级到R9333P25 版本进行观。