



MP捆绑接口shutdown和拔线丢包数量不一致

PPP-MP

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组网及说明

MSR3640双上行到友商设备，MSR3640的Serial1/0、Serial3/0加入到MP-group0里边，Serial1/1、Serial3/1 加入到MP-group1里边，跟对端采用ospf动态路由。两个MP组都转发数据。

问题描述

- 1、在对端设备上长ping msr3640的loopback口地址或业务口的地址或业务口地址，如果采用敲命令的方式分别shutdown掉两个MP组里边任意一个端口，此时对端ping过来会丢2个包后恢复，如果采用分别直接拔掉两个MP组里边任意一个端口的方式，对端ping过来会丢7-8个包左右。
- 2、将一个MP组里边2个端口全部down掉，不管是采用shutdown的方式还是拔线的方式，均是丢2个包。

过程分析

设置相同环境，进行debugging查看发送包信息

解决方法

Shutdown和拔线有些区别。

接口shutdown, 会在serial接口down之前向对端发送terminate request, 对端收到报文就将对应线路移出mp group了。切换比较快。

```
[H3C-Serial2/0]shutdown
```

```
[H3C-Serial2/0]
```

```
*Oct 19 16:50:02:415 2021 H3C PPP/7/FSM_EVENT_0:
```

```
PPP Event:
```

```
Serial2/0 LCP Close Event
```

```
State opened
```

```
*Oct 19 16:50:02:415 2021 H3C PPP/7/FSM_STATE_0:
```

```
PPP State Change:
```

```
Serial2/0 LCP: opened --> closing
```

```
*Oct 19 16:50:02:415 2021 H3C PPP/7/FSM_PACKET_0:
```

```
PPP Packet:
```

```
Serial2/0 Output LCP(c021) Packet, PktLen 8
```

```
Current State closing, code TermReq(05), id 17, len 4
```

```
.....
```

```
%Oct 19 16:50:02:416 2021 H3C IFNET/5/LINK_UPDOWN: Line protocol state on the interface Serial2/0 changed to down.
```

```
*Oct 19 16:50:02:417 2021 H3C PPP/7/MP_EVENT:
```

```
PPP MP Event:
```

```
MP-group1: Serial2/0 has left from the bundle which has 1 sub-channels now!
```

```
%Oct 19 16:50:02:417 2021 H3C IFNET/3/PHY_UPDOWN: Physical state on the interface Serial2/0 changed to down.
```

接口拔线, 对设备来说是不可预知的接口down, 接口down之前无法发出term req, 所以对端在接口没有物理down (有传输) 的情况下不能马上感知到, 要等该serial保活超时。H3C的serial ppp保活默认10s * 5。

建议尝试在拔线之前, 同时登陆两端设备, 拔线后分别dis ppp mp看下成员口状态, 如果有一端dis ppp mp持续有两个serial是active的, 持续几十秒之后才有一个serial变为inactive, 那就是上述的原因。

```
%Oct 19 16:47:16:693 2021 H3C IFNET/5/LINK_UPDOWN: Line protocol state on the interface Serial2/0 changed to down.
```

```
%Oct 19 16:47:16:693 2021 H3C IFNET/3/PHY_UPDOWN: Physical state on the interface Serial2/0 changed to down.
```

```
*Oct 19 16:47:16:693 2021 H3C PPP/7/EXTERNAL_EVENT_0:
```

```
PPP External Event:
```

```
Serial2/0: PPP daemon receive interface down event!
```

```
*Oct 19 16:47:16:693 2021 H3C PPP/7/FSM_EVENT_0:
```

```
PPP Event:
```

```
Serial2/0 LCP Lower Down Event
```

```
State opened
```

```
*Oct 19 16:47:16:693 2021 H3C PPP/7/FSM_STATE_0:
```

```
PPP State Change:
```

```
Serial2/0 LCP: opened --> starting
```

```
*Oct 19 16:47:16:693 2021 H3C PPP/7/FSM_EVENT_0:
```

```
PPP Event:
```

```
Serial2/0 LCP Close Event
```

```
State starting
```

```
*Oct 19 16:47:16:693 2021 H3C PPP/7/FSM_STATE_0:
```

```
PPP State Change:
```

```
Serial2/0 LCP: starting --> initial
```

```
*Oct 19 16:47:16:694 2021 H3C PPP/7/MP_EVENT:
```

```
PPP MP Event:
```

```
MP-group1: Serial2/0 has left from the bundle which has 1 sub-channels now!
```

