

知 BFD and MP-group linkage between MSR5620 router and Huawei equipment does not take effect

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Network Topology

NULL

Problem Description

Customers use H3C's MSR5620 router and Huawei's router to do MP-group binding through WAN lines, and then use MP-group interface to link with BFD to realize fast switching of links. However, BFD does not take effect.

Process Analysis

HW:

```
bfd XiLiaoBian bind peer-ip default-ip interface Mp-group0/8/6
discriminator local 2057
discriminator remote 20
process-interface-status
authentication-mode met-sha1 key-id 1 cipher
%^%#q&U;9Twd6{.&y6(br"BxE!cW3iXF2y4MM3zS2m$%^%# nego-packet
```

H3C:

```
bfd static to-WX peer-ip default-ip interface MP-group2/0/0 source-ip 1.1.1.1 discriminator local 20 re
mote 2057 bfd authentication-mode m-sha1 1 cipher $c$3$JyF7gITw5Dp/8bVomaOxw26Y0AEaL0yH
Dnp9nXsR
```

Since the MP-group interface of H3C device does not support the configuration of linkage with BFD, it can only be set globally. There is no problem when we check the configuration of H3C

Then open Debug BFD on the H3C device to check the interaction of BFD messages:

```
*May 19 16:17:53:502 2021 D2-LN-LY-WuXing-R BFD/7/DEBUG: Send:Ctrl packet, Src:1.1.1.1, Dst:
224.0.0.184, Ver:1, Diag:0, Sta:1 P/F/C/A/D/M:0/0/1/1/0/0, Mult:5 LD/RD:20/2057, Tx:1000ms, Rx:10
00ms, EchoRx:0ms, Auth: 5
```

```
*May 19 16:17:53:502 2021 D2-LN-LY-WuXing-R BFD/7/DEBUG: Create send timer[1000ms] succes
s, LD:20
```

```
*May 19 16:17:54:087 2021 D2-LN-LY-WuXing-R BFD/7/DEBUG: -Slot=2; [K]Recv INTF Pkt ifIndex:
17413/17413, PhyStatus:1
```

```
*May 19 16:17:54:087 2021 D2-LN-LY-WuXing-R BFD/7/DEBUG: -Slot=2; [K]Recv:Ctrl packet, Src:1
69.254.255.254, Dst:224.0.0.184, Ver:1, Diag:0, Sta:1 P/F/C/A/D/M:0/0/1/1/0/0, Mult:3 LD/RD:2057/2
0, Tx:5236ms, Rx:5236ms, EchoRx:0ms, Auth: 5
```

```
*May 19 16:17:54:106 2021 D2-LN-LY-WuXing-R BFD/7/DEBUG: Received (M)SHA1 packet HASH
not match or calculate failed. Discard packet.
```

According to the DEBUG message, the password of the received message is not matched. It is suspected that the password configuration of both sides is wrong or the encryption algorithm is inconsistent

Solution

HUAWEI MET-SHA1 is connected to H3C HMAC-SHA1, so it can be solved after modifying the encryption algorithm on the H3C device side

