V5路由器使用loopback接口建立BGP邻居如何设置BFD最小发送报文间隔等参数

BGP BFD **彭旭** 2023-02-10 发表

问题描述

V5设备BFD检测最小时间间隔等需要在接口设置，当使用loopback接口建立BGP邻居时，如何设置BFD发送报文的最小时间间隔等参数，是在建立bgp邻居的loopback设置，还是在连接对端的出接口设置？

测试如下:

bgp 100

undo synchronization

peer 12.12.12.1 as-number 100

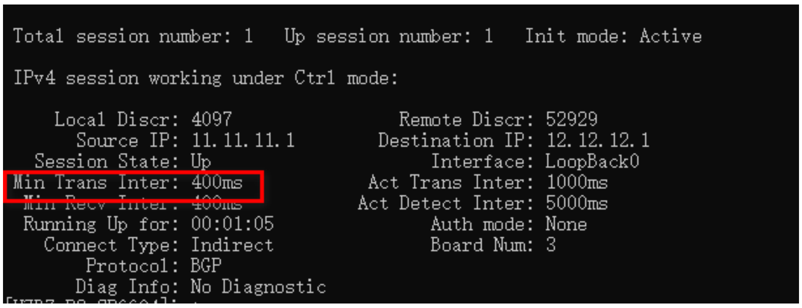
peer 12.12.12.1 connect-interface LoopBack0

peer 12.12.12.1 bfd

interface LoopBack0

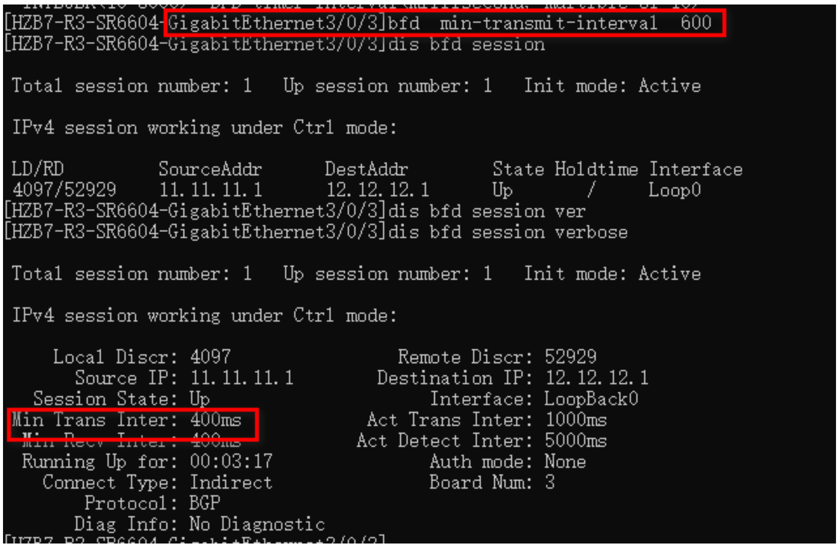
ip address 11.11.11.1 255.255.255.255

查看BFD会话如下，显示最小发送时间间隔为缺省的400秒



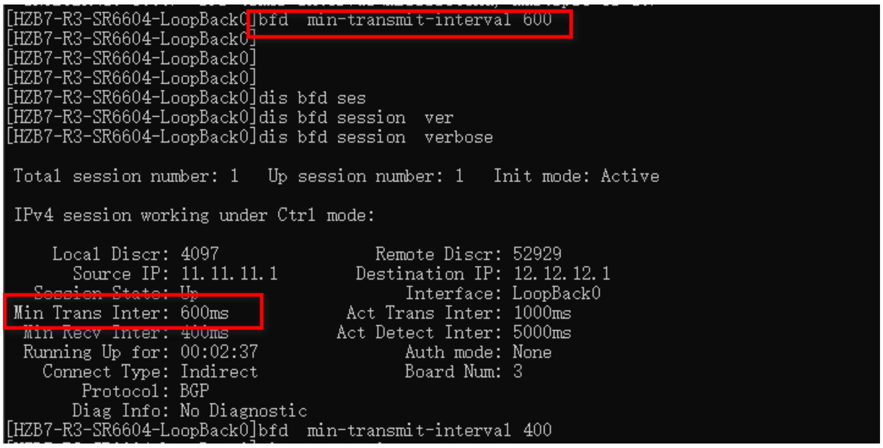
```
 Total session number: 1   Up session number: 1   Init mode: Active

 IPv4 session working under Ctrl mode:

     Local Discr: 4097                 Remote Discr: 52929
       Source IP: 11.11.11.1         Destination IP: 12.12.12.1
   Session State: Up                      Interface: LoopBack0
 Min Trans Inter: 400ms              Act Trans Inter: 1000ms
  Min Recv Inter: 400ms             Act Detect Inter: 5000ms
  Running Up for: 00:01:05                Auth mode: None
    Connect Type: Indirect                Board Num: 3
        Protocol: BGP
       Diag Info: No Diagnostic
```

修改物理接口配置，发现在物理接口下设置并不生效:



```
[HZB7-R3-SR6604-GigabitEthernet3/0/3]bfd  min-transmit-interval  600
[HZB7-R3-SR6604-GigabitEthernet3/0/3]dis bfd session

 Total session number: 1   Up session number: 1   Init mode: Active

 IPv4 session working under Ctrl mode:

 LD/RD          SourceAddr      DestAddr        State Holdtime Interface
 4097/52929     11.11.11.1      12.12.12.1      Up       /      Loop0
[HZB7-R3-SR6604-GigabitEthernet3/0/3]dis bfd session ver
[HZB7-R3-SR6604-GigabitEthernet3/0/3]dis bfd session verbose

 Total session number: 1   Up session number: 1   Init mode: Active

 IPv4 session working under Ctrl mode:

     Local Discr: 4097                 Remote Discr: 52929
       Source IP: 11.11.11.1         Destination IP: 12.12.12.1
   Session State: Up                      Interface: LoopBack0
 Min Trans Inter: 400ms              Act Trans Inter: 1000ms
  Min Recv Inter: 400ms             Act Detect Inter: 5000ms
  Running Up for: 00:03:17                Auth mode: None
    Connect Type: Indirect                Board Num: 3
        Protocol: BGP
       Diag Info: No Diagnostic
```

修改loopback接口配置，发现生效



```
[HZB7-R3-SR6604-LoopBack0]bfd  min-transmit-interval 600
[HZB7-R3-SR6604-LoopBack0]
[HZB7-R3-SR6604-LoopBack0]
[HZB7-R3-SR6604-LoopBack0]
[HZB7-R3-SR6604-LoopBack0]dis bfd ses
[HZB7-R3-SR6604-LoopBack0]dis bfd session  ver
[HZB7-R3-SR6604-LoopBack0]dis bfd session  verbose

 Total session number: 1   Up session number: 1   Init mode: Active

 IPv4 session working under Ctrl mode:

     Local Discr: 4097                 Remote Discr: 52929
       Source IP: 11.11.11.1         Destination IP: 12.12.12.1
   Session State: Up                      Interface: LoopBack0
 Min Trans Inter: 600ms              Act Trans Inter: 1000ms
  Min Recv Inter: 400ms             Act Detect Inter: 5000ms
  Running Up for: 00:02:37                Auth mode: None
    Connect Type: Indirect                Board Num: 3
        Protocol: BGP
       Diag Info: No Diagnostic
[HZB7-R3-SR6604-LoopBack0]bfd  min-transmit-interval 400
```

解决方法

当使用loopback接口建立BGP邻居，设置BFD相关参数时，需要在对应loopback接口设置，而不是在连接对端的物理接口设置