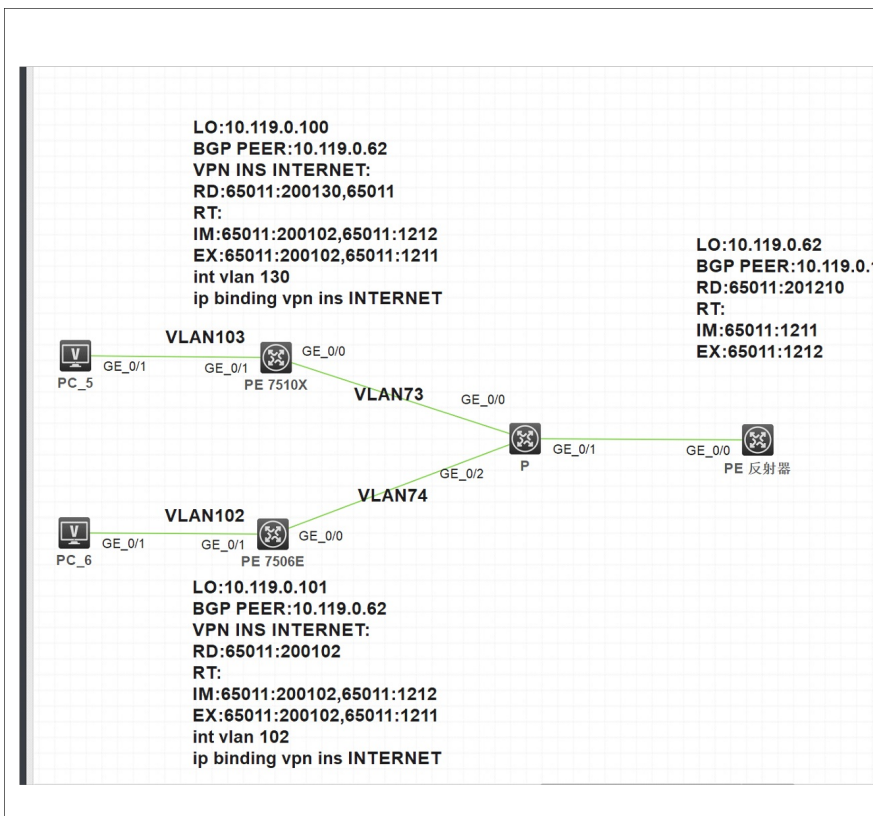


某局点S7510X mpls vpn终端互访不通

转发不通 MPLS L3VPN 赵广旭 2022-03-28 发表

组网及说明



MPLS VPN组网, S7510X(堆叠), S7506X为PE设备, P设备为第三方设备。

问题描述

终端可以ping通PE设备，PE设备之间可以互访，v但是终端之间无法互访。

过程分析

PE之间有路由:

10.119.0.64/32	O_INTRA	10	3	10.119.3.245	Vlan73
10.119.0.66/32	O_INTRA	10	1	10.119.3.245	Vlan73
10.119.0.100/32	Direct	0	0	127.0.0.1	InLoop0
10.119.0.101/32	O_INTRA	10	2	10.119.3.245	Vlan73
10.119.1.50/32	O_INTRA	10	2	10.119.3.245	Vlan73
10.119.1.51/32	O_INTRA	10	2	10.119.3.245	Vlan73
10.119.1.52/32	O_INTRA	10	2	10.119.3.245	Vlan73
10.119.1.53/32	O_INTRA	10	2	10.119.3.245	Vlan73

10.119.0.64/32	O_INTRA	10	3	10.119.3.249	Vlan74
10.119.0.66/32	O_INTRA	10	1	10.119.3.249	Vlan74
10.119.0.100/32	O_INTRA	10	2	10.119.3.249	Vlan74
10.119.0.101/32	Direct	0	0	127.0.0.1	InLoop0
10.119.1.50/32	O_INTRA	10	2	10.119.3.249	Vlan74
10.119.1.51/32	O_INTRA	10	2	10.119.3.249	Vlan74
10.119.1.52/32	O_INTRA	10	2	10.119.3.249	Vlan74
10.119.1.53/32	O_INTRA	10	2	10.119.3.249	Vlan74

查看BGP状态:

```
<ZW-HEXIN>DIS BGP peer vpnv4
BGP local router ID: 10.111.139.1
Local AS number: 65011
Total number of peers: 2                Peers in established state: 2
* - Dynamically created peer
^ - Peer created through link-local address
Peer      AS  MsgRcvd  MsgSent  OutQ  PrefRcv  Up/Down  State
10.119.0.62    65011    25285    23469    0     570 0161h59m Established
10.119.1.62    65011   111073   108992    0     570 1413h47m Established
```

```
[SCW-HX]dis bgp peer vpnv4
BGP local router ID: 10.119.0.101
Local AS number: 65011
Total number of peers: 2                Peers in established state: 2
* - Dynamically created peer
^ - Peer created through link-local address
Peer      AS  MsgRcvd  MsgSent  OutQ  PrefRcv  Up/Down  State
10.119.0.62    65011   95914   77436    0     23 0625h02m Established
10.119.1.62    65011   52105   43718    0     23 0625h02m Established
```

查vpn看路由也是正常的。

```
<ZW-HEXIN>dis ip routing-table vpn-instance SMZJ-WLAN-Internet01
Destinations : 47          Routes : 47
Destination/Mask  Proto  Pre  Cost      NextHop          Interface
0.0.0.0/0         BGP    255  2         10.119.0.62      Vlan73
0.0.0.0/32        Direct  0    0         127.0.0.1        InLoop0
10.111.102.0/24   BGP    255  0         10.119.0.101     Vlan73
10.111.103.0/24   BGP    255  0         10.119.0.101     Vlan73
10.111.104.0/26   BGP    255  0         10.119.0.101     Vlan73
10.111.104.192/26 BGP    255  0         10.119.0.101     Vlan73
10.111.106.0/24   BGP    255  0         10.119.0.101     Vlan73
10.111.107.0/24   BGP    255  0         10.119.0.101     Vlan73
10.111.119.0/24   BGP    255  0         10.119.0.101     Vlan73
10.111.125.32/27  BGP    130  0         10.111.125.33    Vlan1251
10.111.125.33/32  BGP    130  0         127.0.0.1        InLoop0
10.111.131.0/24   Direct  0    0         10.111.131.1     Vlan131
10.111.131.0/32   Direct  0    0         10.111.131.1     Vlan131
10.111.131.1/32   Direct  0    0         127.0.0.1        InLoop0
```

查看内外层标签:

```
[ZW-HEXIN]dis bgp routing-table vpnv4 10.111.102.0 24
解决方法
Local router ID: 10.111.139.1
Local AS number: 65011
Route distinguisher: 65011:200001 (SMZJ-WLAN-Internet01)
Total number of routes: 1
Paths: 1 available, 1 best

BGP routing table information of 10.111.102.0/24:
From : 10.119.0.62 (10.119.0.62)
Rely nexthop : 10.119.3.245
Original nexthop: 10.119.0.101
OutLabel : 1119
Ext-Community : <RT: 65011:200102>, <RT: 65011:201042>
RxPathID : 0x0
TxPathID : 0x0
AS-path : (null)
Origin : incomplete
Attribute value : MED 0, localpref 100, pref-val 0
State : valid, internal, best, remoteredist
Originator : 10.119.0.101
Cluster list : 0.0.0.200
IP precedence : N/A
QoS local ID : N/A
Traffic index : N/A
Tunnel policy : NULL
Rely tunnel IDs : 1855
```

远程分析后，为路由资源不足引起，在流量入单板chassis 2 slot 4上查询目的终端路由不存在，diagfile显示设备一直报I3资源不足。

