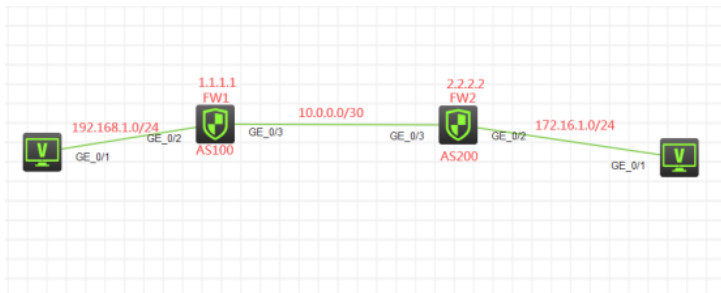


知 F1060路由模式典型组网配置案例11 (EBGP)

设备部署方式 H3C模拟器 韦家宁 2020-03-29 发表

组网及说明



组网说明:

本案例采用H3C HCL模拟器的F1060防火墙来模拟防火墙路由模式的典型部署。为了实现PC之间能够相互通信,因此需要分别在FW、FW2采用三层互联,同时FW1、FW2采用路由模式,最终实现PC之间能够相互PING通。

配置步骤

- 1、按照网络拓扑图正确配置IP地址
- 2、FW1、FW2建立EBGP邻居关系

配置关键点

FW1:

```
<H3C>sys
System View: return to User View with Ctrl+Z.
[H3C]sysname FW1
[FW1]acl basic 2002
[FW1-acl-ipv4-basic-2002]rule 0 permit source any
[FW1-acl-ipv4-basic-2002]quit
[FW1]
[FW1]zone-pair security source trust destination untrust
[FW1-zone-pair-security-Trust-Untrust]packet-filter 2002
[FW1-zone-pair-security-Trust-Untrust]quit
[FW1]
[FW1]zone-pair security source untrust destination trust
[FW1-zone-pair-security-Untrust-Trust]packet-filter 2002
[FW1-zone-pair-security-Untrust-Trust]quit
[FW1]
[FW1]zone-pair security source trust destination local
[FW1-zone-pair-security-Trust-Local]packet-filter 2002
[FW1-zone-pair-security-Trust-Local]quit
[FW1]
[FW1]zone-pair security source local destination trust
[FW1-zone-pair-security-Local-Trust]packet-filter 2002
[FW1-zone-pair-security-Local-Trust]quit
[FW1]
[FW1]zone-pair security source untrust destination local
[FW1-zone-pair-security-Untrust-Local]packet-filter 2002
[FW1-zone-pair-security-Untrust-Local]quit
[FW1]
[FW1]zone-pair security source local destination untrust
[FW1-zone-pair-security-Local-Untrust]packet-filter 2002
[FW1-zone-pair-security-Local-Untrust]quit
[FW1]
[FW1]zone-pair security source trust destination trust
[FW1-zone-pair-security-Trust-Trust]packet-filter 2002
[FW1-zone-pair-security-Trust-Trust]quit
[FW1]
```

```
[FW1]zone-pair security source untrust destination untrust
[FW1-zone-pair-security-Untrust-Untrust]packet-filter 2002
[FW1-zone-pair-security-Untrust-Untrust]quit
[FW1]int loopback 0
[FW1-LoopBack0]ip address 1.1.1.1 32
[FW1-LoopBack0]quit
[FW1]int gi 1/0/2
[FW1-GigabitEthernet1/0/2]ip address 192.168.1.1 24
[FW1-GigabitEthernet1/0/2]quit
[FW1]int gi 1/0/3
[FW1-GigabitEthernet1/0/3]des <connect to FW2>
[FW1-GigabitEthernet1/0/3]ip address 10.0.0.1 30
[FW1-GigabitEthernet1/0/3]quit
[FW1]security-zone name Trust
[FW1-security-zone-Trust]import interface GigabitEthernet 1/0/2
[FW1-security-zone-Trust]quit
[FW1]security-zone name Untrust
[FW1-security-zone-Untrust]import interface GigabitEthernet 1/0/3
[FW1-security-zone-Untrust]import interface LoopBack 0
[FW1-security-zone-Untrust]quit
[FW1]bgp 100
[FW1-bgp-default]router-id 1.1.1.1
[FW1-bgp-default]peer 10.0.0.2 as-number 200
[FW1-bgp-default]address-family ipv4 unicast
[FW1-bgp-default-ipv4]peer 10.0.0.2 enable
[FW1-bgp-default-ipv4]network 192.168.1.0 255.255.255.0
[FW1-bgp-default-ipv4]quit
[FW1-bgp-default]quit
```

FW2:

```
<H3C>sys
System View: return to User View with Ctrl+Z.
[H3C]sysname FW2
[FW2]acl basic 2002
[FW2-acl-ipv4-basic-2002]rule 0 permit source any
[FW2-acl-ipv4-basic-2002]quit
[FW2]
[FW2]zone-pair security source trust destination untrust
[FW2-zone-pair-security-Trust-Untrust]packet-filter 2002
[FW2-zone-pair-security-Trust-Untrust]quit
[FW2]
[FW2]zone-pair security source untrust destination trust
[FW2-zone-pair-security-Untrust-Trust]packet-filter 2002
[FW2-zone-pair-security-Untrust-Trust]quit
[FW2]
[FW2]zone-pair security source trust destination local
[FW2-zone-pair-security-Trust-Local]packet-filter 2002
[FW2-zone-pair-security-Trust-Local]quit
[FW2]
[FW2]zone-pair security source local destination trust
[FW2-zone-pair-security-Local-Trust]packet-filter 2002
[FW2-zone-pair-security-Local-Trust]quit
[FW2]
[FW2]zone-pair security source untrust destination local
[FW2-zone-pair-security-Untrust-Local]packet-filter 2002
[FW2-zone-pair-security-Untrust-Local]quit
[FW2]
[FW2]zone-pair security source local destination untrust
[FW2-zone-pair-security-Local-Untrust]packet-filter 2002
[FW2-zone-pair-security-Local-Untrust]quit
[FW2]
[FW2]zone-pair security source trust destination trust
[FW2-zone-pair-security-Trust-Trust]packet-filter 2002
[FW2-zone-pair-security-Trust-Trust]quit
```

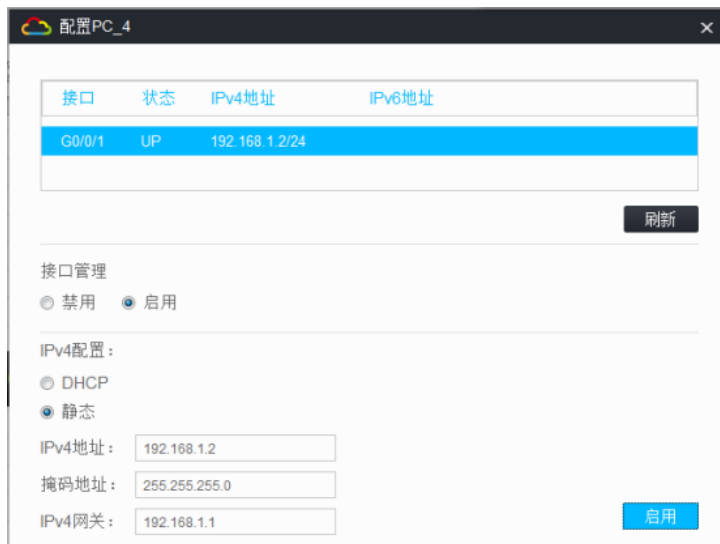
```

[FW2]
[FW2]zone-pair security source untrust destination untrust
[FW2-zone-pair-security-Untrust-Untrust]packet-filter 2002
[FW2-zone-pair-security-Untrust-Untrust]quit
[FW2]int loopback 0
[FW2-LoopBack0]ip address 2.2.2.2 32
[FW2-LoopBack0]quit
[FW2]int gi 1/0/2
[FW2-GigabitEthernet1/0/2]ip address 172.16.1.1 24
[FW2-GigabitEthernet1/0/2]quit
[FW2]int gi 1/0/3
[FW2-GigabitEthernet1/0/3]des <connect to FW1>
[FW2-GigabitEthernet1/0/3]ip address 10.0.0.2 30
[FW2-GigabitEthernet1/0/3]quit
[FW2]security-zone name Trust
[FW2-security-zone-Trust]import interface GigabitEthernet 1/0/2
[FW2-security-zone-Trust]quit
[FW2]security-zone name Untrust
[FW2-security-zone-Untrust]import interface GigabitEthernet 1/0/3
[FW2-security-zone-Untrust]import interface LoopBack 0
[FW2-security-zone-Untrust]quit
[FW2]bgp 200
[FW2-bgp-default]router-id 2.2.2.2
[FW2-bgp-default]peer 10.0.0.1 as-number 100
[FW2-bgp-default]address-family ipv4 unicast
[FW2-bgp-default-ipv4]peer 10.0.0.1 enable
[FW2-bgp-default-ipv4]network 172.16.1.0 255.255.255.0
[FW2-bgp-default-ipv4]quit
[FW2-bgp-default]quit

```

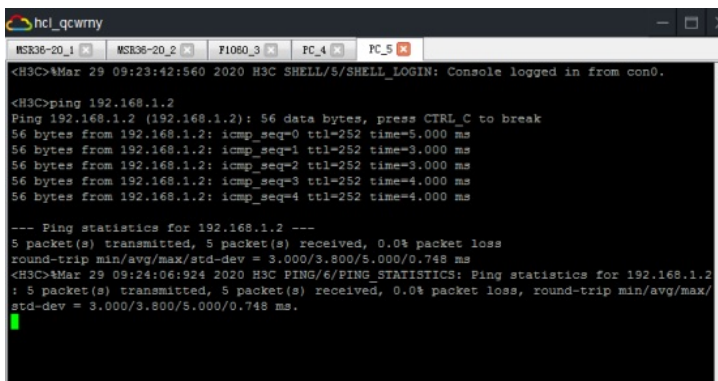
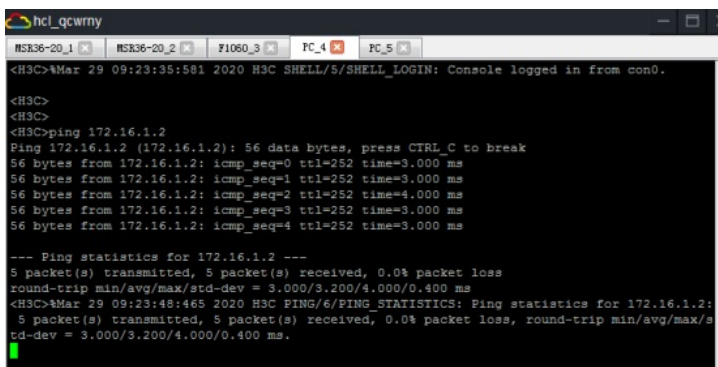
测试:

PC都填写IP地址:





PC之间可以相互PING通:



分别查看FW1、FW2的BGP邻居信息:



分别查看FW1、FW2的路由表:

```
[FW1]dis ip routing-table
Destinations : 18      Routes : 18

Destination/Mask    Proto  Pre Cost    NextHop    Interface
0.0.0.0/32          Direct  0  0      127.0.0.1  InLoop0
1.1.1.1/32          Direct  0  0      127.0.0.1  InLoop0
10.0.0.0/30         Direct  0  0      10.0.0.1   GE1/0/3
10.0.0.0/32         Direct  0  0      10.0.0.1   GE1/0/3
10.0.0.1/32         Direct  0  0      127.0.0.1  InLoop0
10.0.0.3/32         Direct  0  0      10.0.0.1   GE1/0/3
127.0.0.0/8         Direct  0  0      127.0.0.1  InLoop0
127.0.0.0/32        Direct  0  0      127.0.0.1  InLoop0
127.0.0.1/32        Direct  0  0      127.0.0.1  InLoop0
127.255.255.255/32 Direct  0  0      127.0.0.1  InLoop0
172.16.1.0/24       BGP     255 0      10.0.0.2   GE1/0/3
192.168.1.0/24      Direct  0  0      192.168.1.1 GE1/0/2
192.168.1.0/32      Direct  0  0      192.168.1.1 GE1/0/2
192.168.1.1/32      Direct  0  0      127.0.0.1  InLoop0
192.168.1.255/32    Direct  0  0      192.168.1.1 GE1/0/2
224.0.0.0/4         Direct  0  0      0.0.0.0    NULL0
224.0.0.0/24        Direct  0  0      0.0.0.0    NULL0
255.255.255.255/32 Direct  0  0      127.0.0.1  InLoop0
[FW1]
```

```
<FW2>dis ip routing-table
Destinations : 18      Routes : 18

Destination/Mask    Proto  Pre Cost    NextHop    Interface
0.0.0.0/32          Direct  0  0      127.0.0.1  InLoop0
2.2.2.2/32          Direct  0  0      127.0.0.1  InLoop0
10.0.0.0/30         Direct  0  0      10.0.0.2   GE1/0/3
10.0.0.0/32         Direct  0  0      10.0.0.2   GE1/0/3
10.0.0.2/32         Direct  0  0      127.0.0.1  InLoop0
10.0.0.3/32         Direct  0  0      10.0.0.2   GE1/0/3
127.0.0.0/8         Direct  0  0      127.0.0.1  InLoop0
127.0.0.0/32        Direct  0  0      127.0.0.1  InLoop0
127.0.0.1/32        Direct  0  0      127.0.0.1  InLoop0
127.255.255.255/32 Direct  0  0      127.0.0.1  InLoop0
172.16.1.0/24       Direct  0  0      172.16.1.1 GE1/0/2
172.16.1.0/32       Direct  0  0      172.16.1.1 GE1/0/2
172.16.1.1/32       Direct  0  0      127.0.0.1  InLoop0
172.16.1.255/32     Direct  0  0      172.16.1.1 GE1/0/2
192.168.1.0/24      BGP     255 0      10.0.0.1   GE1/0/3
224.0.0.0/4         Direct  0  0      0.0.0.0    NULL0
224.0.0.0/24        Direct  0  0      0.0.0.0    NULL0
255.255.255.255/32 Direct  0  0      127.0.0.1  InLoop0
<FW2>
```

至此，F1060路由模式典型组网配置案例11（EBGP）已完成！