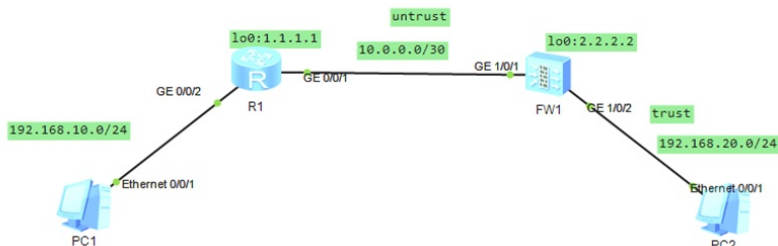


组网及说明



组网说明:

本案例采用ENSP模拟器的防火墙来部署路由模式的典型配置，安全域在网络拓扑图中已经有了明确的标识，全网通过EBGP路由协议实现PC之间的互通。

配置思路:

- 1、按照网络拓扑图配置IP地址和、OSPF、EBGP。
- 2、配置防火墙的安全域和安全策略。

配置步骤

R1:

```
<Huawei>u t m
Info: Current terminal monitor is off.
<Huawei>u t d
Info: Current terminal debugging is off.
<Huawei>system
Enter system view, return user view with Ctrl+Z.
[Huawei]sysname R1
[R1]int gi 0/0/2
[R1-GigabitEthernet0/0/2]ip address 192.168.10.1 24
[R1-GigabitEthernet0/0/2]quit
[R1]int gi 0/0/1
[R1-GigabitEthernet0/0/1]ip address 10.0.0.1 30
[R1-GigabitEthernet0/0/1]quit

[R1]bgp 100
[R1-bgp]router-id 10.0.0.1
[R1-bgp]peer 10.0.0.2 as-number 200
[R1-bgp]peer 10.0.0.2 connect-interface GigabitEthernet 0/0/1
[R1-bgp]ipv4-family unicast
[R1-bgp-af-ipv4]peer 10.0.0.2 enable
[R1-bgp-af-ipv4]network 192.168.10.0 24
[R1-bgp-af-ipv4]quit
```

FW1:

```
<USG6000V1>u t m
Info: Current terminal monitor is off.
<USG6000V1>u t d
Info: Current terminal debugging is off.
<USG6000V1>system
Enter system view, return user view with Ctrl+Z.
[USG6000V1]sysname FW1
```

```

[FW1]int gi 1/0/1
[FW1-GigabitEthernet1/0/1]ip address 10.0.0.2 30
[FW1-GigabitEthernet1/0/1]quit
[FW1]int gi 1/0/2
[FW1-GigabitEthernet1/0/2]ip address 192.168.20.1 24
[FW1-GigabitEthernet1/0/2]quit

[FW1]bgp 200
[FW1-bgp]router-id 10.0.0.2
[FW1-bgp]peer 10.0.0.1 as-number 100
[FW1-bgp]peer 10.0.0.1 connect-interface GigabitEthernet 1/0/1
[FW1-bgp]ipv4-family unicast
[FW1-bgp-af-ipv4]peer 10.0.0.1 enable
[FW1-bgp-af-ipv4]network 192.168.20.0 24
[FW1-bgp-af-ipv4]quit

```

```

[FW1]firewall zone trust
[FW1-zone-trust]add int gi 1/0/2
[FW1-zone-trust]quit
[FW1]firewall zone untrust
[FW1-zone-untrust]add int gi 1/0/1
[FW1-zone-untrust]quit
[FW1]security-policy
[FW1-policy-security]default action permit
Warning:Setting the default packet filtering to permit poses security risks. You
are advised to configure the security policy based on the actual data flows. Ar
e you sure you want to continue?[Y/N]y
[FW1-policy-security]quit

```

分别查看FW1和R1的BGP邻居关系建立的情况，已完成建立！

```

[FW1]dis bgp peer
2024-09-13 04:10:35.250

BGP local router ID : 10.0.0.2
Local AS number : 200
Total number of peers : 1          Peers in established state : 1

Peer          V          AS  MsgRcvd  MsgSent  OutQ  Up/Down      State Pre
fRcv
10.0.0.1      4          100    3         3        0 00:00:21  Established
1

```

```

[R1]dis bgp peer

BGP local router ID : 10.0.0.1
Local AS number : 100
Total number of peers : 1          Peers in established state : 1

Peer          V          AS  MsgRcvd  MsgSent  OutQ  Up/Down      State Pre
fRcv
10.0.0.2      4          200    3         5        0 00:00:34  Established
1

```

使用dis ip routing-table命令查看FW1和R1的路由表，均能学习到对端传递过来的路由。

```
[FW1]dis ip routing-table
2024-09-13 04:10:59.580
Route Flags: R - relay, D - download to fib
-----
Routing Tables: Public
      Destinations : 7          Routes : 7

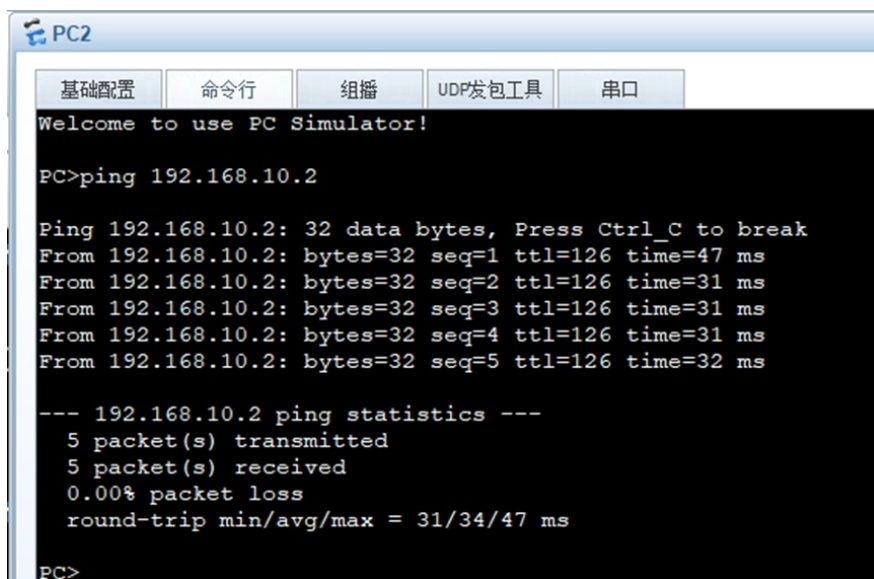
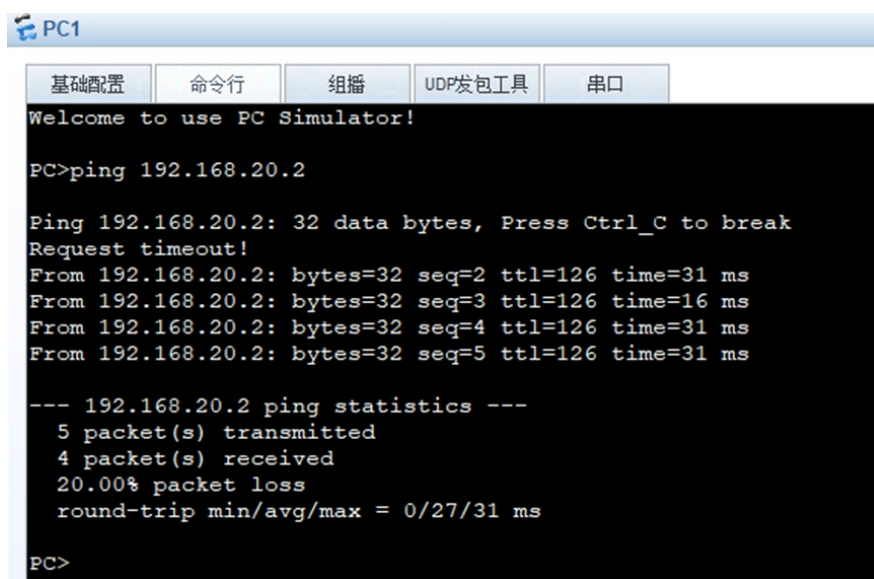
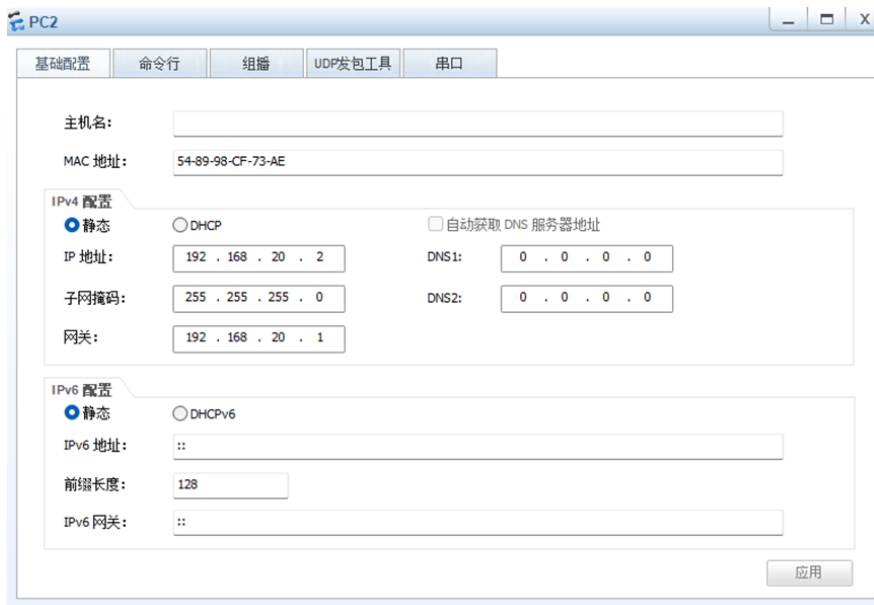
Destination/Mask    Proto  Pre  Cost           Flags NextHop         Interface
-----
1/0/1 10.0.0.0/30 Direct 0    0             D  10.0.0.2         GigabitEthernet
1/0/1 10.0.0.2/32 Direct 0    0             D  127.0.0.1        GigabitEthernet
1/0/1 127.0.0.0/8 Direct 0    0             D  127.0.0.1        InLoopBack0
1/0/1 127.0.0.1/32 Direct 0    0             D  127.0.0.1        InLoopBack0
1/0/1 192.168.10.0/24 EBGP   255  0             RD  10.0.0.1         GigabitEthernet
1/0/1 192.168.20.0/24 Direct 0    0             D  192.168.20.1    GigabitEthernet
1/0/2 192.168.20.1/32 Direct 0    0             D  127.0.0.1        GigabitEthernet
1/0/2
```

```
[R1]dis ip routing-table
Route Flags: R - relay, D - download to fib
-----
Routing Tables: Public
      Destinations : 7          Routes : 7

Destination/Mask    Proto  Pre  Cost           Flags NextHop         Interface
-----
0/0/1 10.0.0.0/30 Direct 0    0             D  10.0.0.1         GigabitEthernet
0/0/1 10.0.0.1/32 Direct 0    0             D  127.0.0.1        GigabitEthernet
0/0/1 127.0.0.0/8 Direct 0    0             D  127.0.0.1        InLoopBack0
0/0/1 127.0.0.1/32 Direct 0    0             D  127.0.0.1        InLoopBack0
0/0/2 192.168.10.0/24 Direct 0    0             D  192.168.10.1    GigabitEthernet
0/0/2 192.168.10.1/32 Direct 0    0             D  127.0.0.1        GigabitEthernet
0/0/2 192.168.20.0/24 EBGP   255  0             RD  10.0.0.2         GigabitEthernet
0/0/1
```

PC分别填写IP地址，且能相互PING通。





至此，华为防火墙路由模式典型组网配置案例（EBGP）已完成！