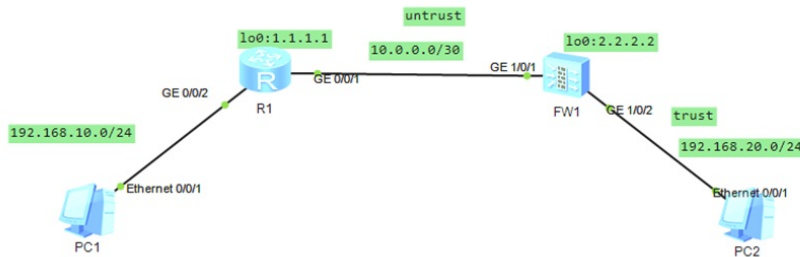# 【MVS】华为防火墙路由模式典型组网配置案例-静态路由

网络相关　韦家宁　2024-09-13 发表

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，全网通过静态路由协议实现PC之间的互通。

配置思路：
1、按照网络拓扑图配置IP地址和静态路由。
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]ip route-static 192.168.20.0 24 10.0.0.2
```

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]ip route-static 192.168.10.0 24 10.0.0.1

[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

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 05:57:13.220
Route Flags: R - relay, D - download to fib
------------------------------------------------------------------------------
Routing Tables: Public
         Destinations : 8       Routes : 8

Destination/Mask     Proto    Pre  Cost      Flags NextHop        Interface

        2.2.2.2/32   Direct   0    0            D  127.0.0.1      LoopBack0
       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
      127.0.0.1/32   Direct   0    0            D  127.0.0.1      InLoopBack0
   192.168.10.0/24   Static   60   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
```
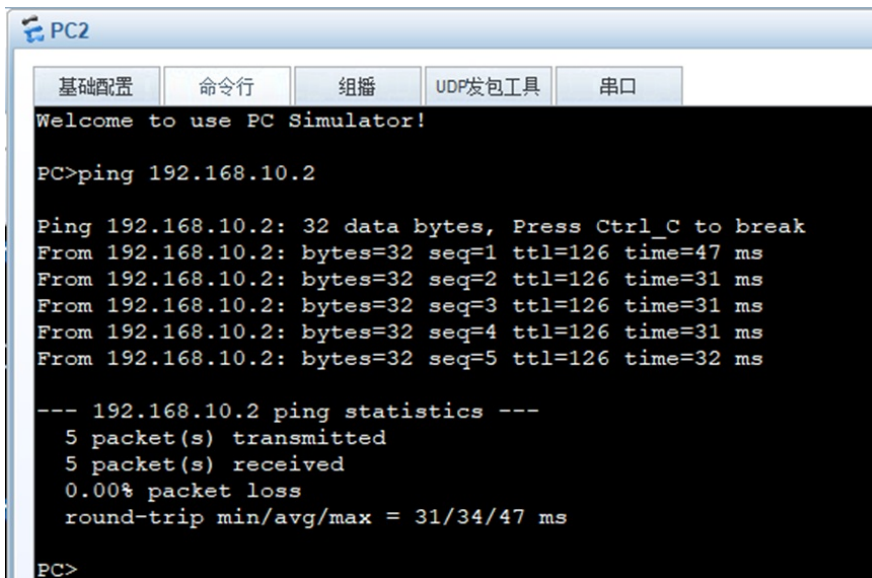
```
[R1]dis ip routing-table
Route Flags: R - relay, D - download to fib
------------------------------------------------------------------------------
Routing Tables: Public
         Destinations : 8       Routes : 8

Destination/Mask     Proto    Pre  Cost      Flags NextHop        Interface

        1.1.1.1/32   Direct   0    0            D  127.0.0.1      LoopBack0
       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
      127.0.0.1/32   Direct   0    0            D  127.0.0.1      InLoopBack0
   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   Static   60   0            RD 10.0.0.2       GigabitEthernet
0/0/1
```
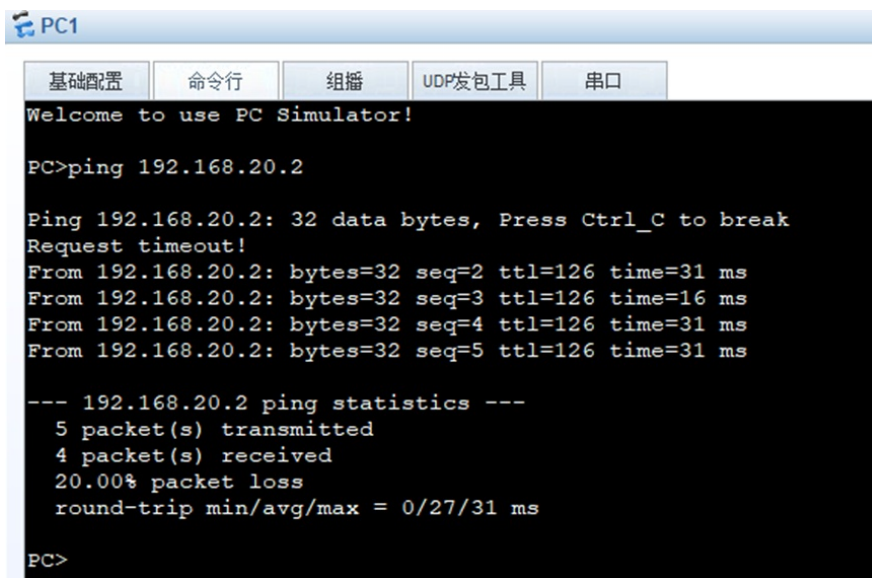
PC分别填写IP地址，且能相互PING通。

PC2

基础配置 | 命令行 | 组播 | UDP发包工具 | 串口

主机名:

MAC 地址: 54-89-98-CF-73-AE

IPv4 配置

● 静态 ○ DHCP   □ 自动获取 DNS 服务器地址

IP 地址: 192 . 168 . 20 . 2   DNS1: 0 . 0 . 0 . 0

子网掩码: 255 . 255 . 255 . 0   DNS2: 0 . 0 . 0 . 0

网关: 192 . 168 . 20 . 1

IPv6 配置

● 静态 ○ DHCPv6

IPv6 地址: ::

前缀长度: 128

IPv6 网关: ::

应用

PC1

基础配置 | 命令行 | 组播 | UDP发包工具 | 串口

```
Welcome to use PC Simulator!

PC>ping 192.168.20.2

Ping 192.168.20.2: 32 data bytes, Press Ctrl_C to break
Request timeout!
From 192.168.20.2: bytes=32 seq=2 ttl=126 time=31 ms
From 192.168.20.2: bytes=32 seq=3 ttl=126 time=16 ms
From 192.168.20.2: bytes=32 seq=4 ttl=126 time=31 ms
From 192.168.20.2: bytes=32 seq=5 ttl=126 time=31 ms

--- 192.168.20.2 ping statistics ---
  5 packet(s) transmitted
  4 packet(s) received
  20.00% packet loss
  round-trip min/avg/max = 0/27/31 ms

PC>
```

PC2

基础配置 | 命令行 | 组播 | UDP发包工具 | 串口

```
Welcome to use PC Simulator!

PC>ping 192.168.10.2

Ping 192.168.10.2: 32 data bytes, Press Ctrl_C to break
From 192.168.10.2: bytes=32 seq=1 ttl=126 time=47 ms
From 192.168.10.2: bytes=32 seq=2 ttl=126 time=31 ms
From 192.168.10.2: bytes=32 seq=3 ttl=126 time=31 ms
From 192.168.10.2: bytes=32 seq=4 ttl=126 time=31 ms
From 192.168.10.2: bytes=32 seq=5 ttl=126 time=32 ms

--- 192.168.10.2 ping statistics ---
  5 packet(s) transmitted
  5 packet(s) received
  0.00% packet loss
  round-trip min/avg/max = 31/34/47 ms

PC>
```

至此，华为防火墙路由模式典型组网配置案例（静态路由）已完成！