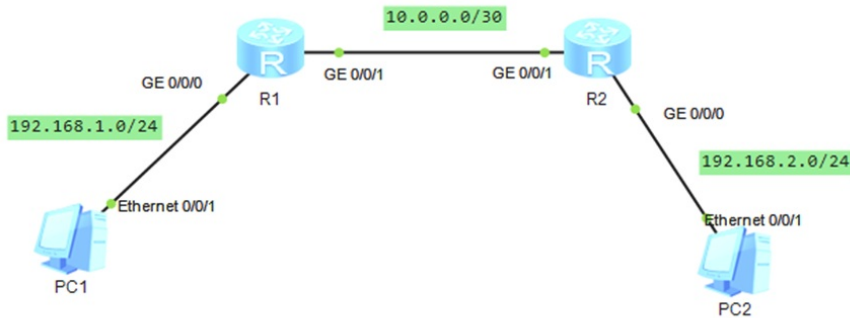


【MVS】华为路由器RIP接口明文认证典型组网配置案例

网络相关 韦家宁 2024-07-02 发表

组网及说明



组网说明：本案例采用ENSP模拟器来模拟RIP接口明文认证，实现路由器之间RIP路由协议的安全对接，保障网络的安全。

配置步骤

- 1、按照网络拓扑图配置IP地址。
- 2、配置R1、R2路由器的RIP及接口明文认证

配置关键点

R1:

```
<Huawei>u t m
Info: Current terminal monitor is off.
<Huawei>u t d
Info: Current terminal debugging is off.
<Huawei>sys
Enter system view, return user view with Ctrl+Z.
[Huawei]sysname R1
[R1]int gi 0/0/0
[R1-GigabitEthernet0/0/0]ip address 192.168.1.1 24
[R1-GigabitEthernet0/0/0]quit
[R1]int gi 0/0/1
[R1-GigabitEthernet0/0/1]ip address 10.0.0.1 30
[R1-GigabitEthernet0/0/1]quit
[R1]rip 1
[R1-rip-1]version 2
[R1-rip-1]undo summary
[R1-rip-1]network 10.0.0.0
[R1-rip-1]network 192.168.1.0
[R1-rip-1]quit
[R1]int gi 0/0/0
[R1-GigabitEthernet0/0/0]quit
[R1]int gi 0/0/1
[R1-GigabitEthernet0/0/1]rip authentication-mode simple weijianing
//接口启用RIP 明文认证，密钥为weijianing
[R1-GigabitEthernet0/0/1]quit
```

R2:

```
<Huawei>u t m
Info: Current terminal monitor is off.
<Huawei>u t d
Info: Current terminal debugging is off.
<Huawei>sys
Enter system view, return user view with Ctrl+Z.
[Huawei]sysname R2
[R2]int gi 0/0/0
[R2-GigabitEthernet0/0/0]ip address 192.168.2.1 24
[R2-GigabitEthernet0/0/0]quit
[R2]int gi 0/0/1
[R2-GigabitEthernet0/0/1]ip address 10.0.0.2 30
[R2-GigabitEthernet0/0/1]quit
```

```

[R2]rip 1
[R2-rip-1]version 2
[R2-rip-1]undo summary
[R2-rip-1]network 10.0.0.0
[R2-rip-1]network 192.168.2.0
[R2-rip-1]quit
[R2]int gi 0/0/0
[R2-GigabitEthernet0/0/0]quit
[R2]int gi 0/0/1
[R2-GigabitEthernet0/0/1]rip authentication-mode simple weijianing
[R2-GigabitEthernet0/0/1]quit

```

查看R1、R2的路由表，均已通过RIP学习到对端发布的路由：

```

[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
0/0/0              192.168.1.0/24 Direct  0    0        D  192.168.1.1       GigabitEthernet
0/0/0              192.168.1.1/32 Direct  0    0        D  127.0.0.1          GigabitEthernet
0/0/0              192.168.2.0/24 RIP      100  1        D  10.0.0.2           GigabitEthernet
0/0/1
[R1]

```

```

Route Flags: R - relay, D - download to fib
-----
Routing Tables: Public
Destinations : 7          Routes : 7

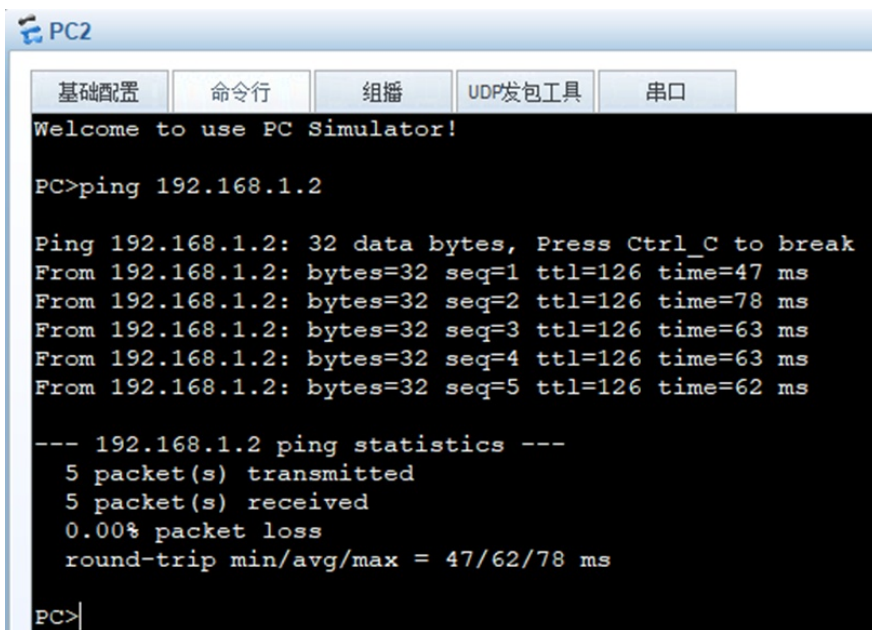
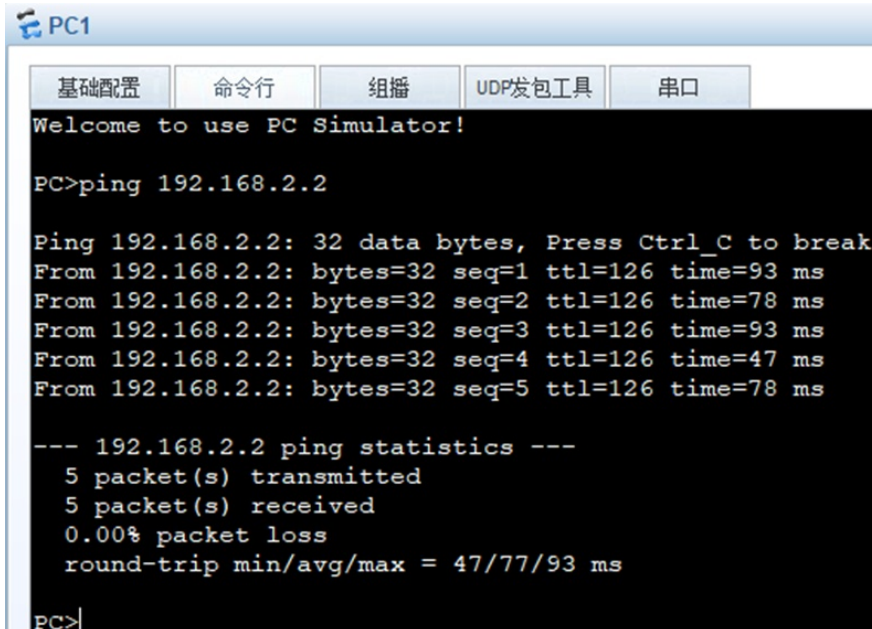
Destination/Mask    Proto  Pre  Cost    Flags NextHop         Interface
-----
0/0/1              10.0.0.0/30  Direct  0    0        D  10.0.0.2           GigabitEthernet
0/0/1              10.0.0.2/32  Direct  0    0        D  127.0.0.1          GigabitEthernet
0/0/1              127.0.0.0/8  Direct  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
0/0/1              192.168.1.0/24 RIP      100  1        D  10.0.0.1           GigabitEthernet
0/0/1              192.168.2.0/24 Direct  0    0        D  192.168.2.1       GigabitEthernet
0/0/0              192.168.2.1/32 Direct  0    0        D  127.0.0.1          GigabitEthernet
0/0/0
[R2]

```

PC分别填写IP地址，且能相互PING通：

The screenshot shows the configuration window for PC1. The IPv4 configuration is set to static. The IP address is 192.168.1.2, the subnet mask is 255.255.255.0, and the gateway is 192.168.1.1. The DNS servers are both set to 0.0.0.0. The MAC address is 54-89-98-50-02-09.

Field	Value
主机名	
MAC 地址	54-89-98-50-02-09
IPv4 配置	<input checked="" type="radio"/> 静态 <input type="radio"/> DHCP <input type="checkbox"/> 自动获取 DNS 服务器地址
IP 地址	192.168.1.2
子网掩码	255.255.255.0
网关	192.168.1.1
DNS1	0.0.0.0
DNS2	0.0.0.0



至此，RIP接口明文认证典型组网配置案例已完成！