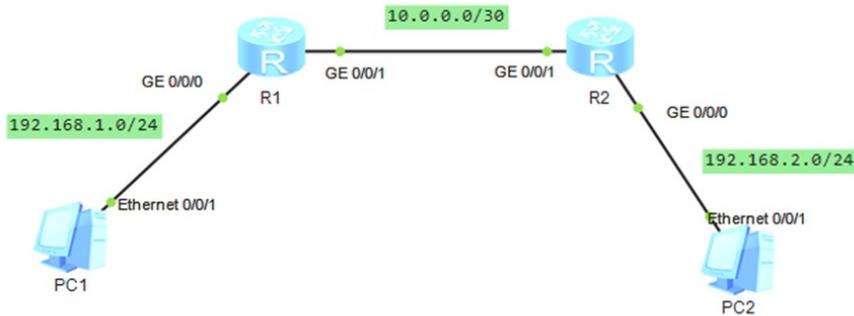


# 【MVS】华为路由器RIP接口MD5认证典型组网配置案例

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MD5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MD5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 md5 usual weijianing //接口启用RIP MD5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 md5 usual 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
-----
 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
 192.168.1.0/24     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

```

```

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

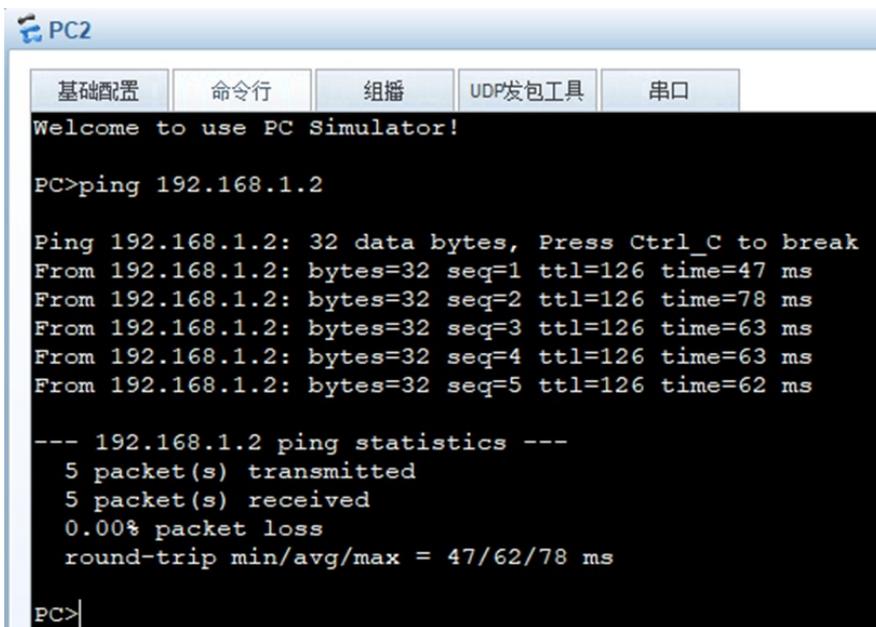
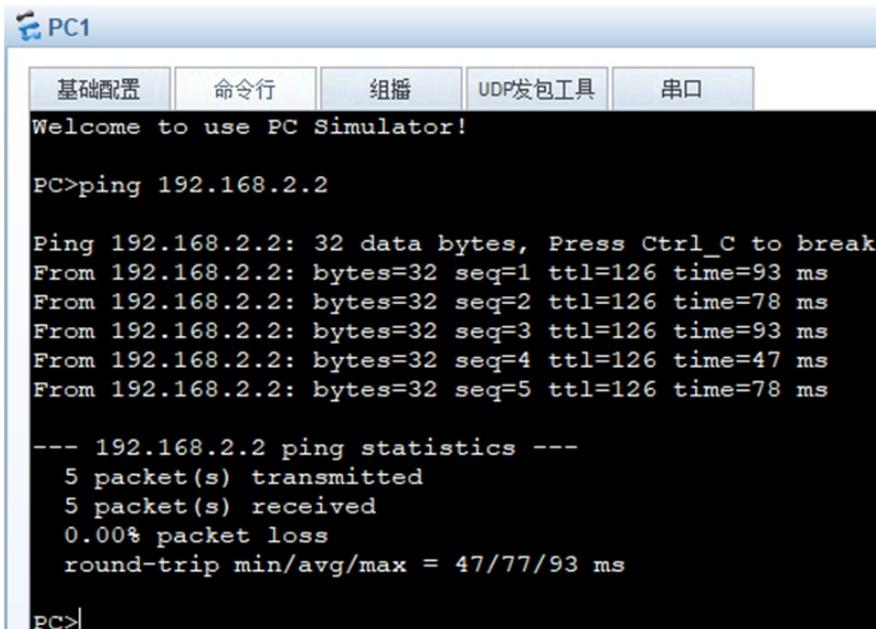
Destination/Mask    Proto   Pre  Cost   Flags NextHop         Interface
-----
 10.0.0.0/30        Direct  0    0           D  10.0.0.2         GigabitEthernet
0/0/1
 10.0.0.2/32        Direct  0    0           D  127.0.0.1        GigabitEthernet
0/0/1
 127.0.0.0/8        Direct  0    0           D  127.0.0.1        InLoopBack0
 127.0.0.1/32       Direct  0    0           D  127.0.0.1        InLoopBack0
 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

```

PC分别填写IP地址，且能相互PING通：

PC1 Configuration Window:

- Host Name: [ ]
- MAC Address: 54-89-98-50-02-09
- IPv4 Configuration:
  - Static IP
  - DHCP
  - Automatically obtain DNS server address
  - IP Address: 192.168.1.2
  - Subnet Mask: 255.255.255.0
  - Gateway: 192.168.1.1
  - DNS1: 0.0.0.0
  - DNS2: 0.0.0.0



至此，华为路由器RIP接口MD5认证典型组网配置案例已完成！