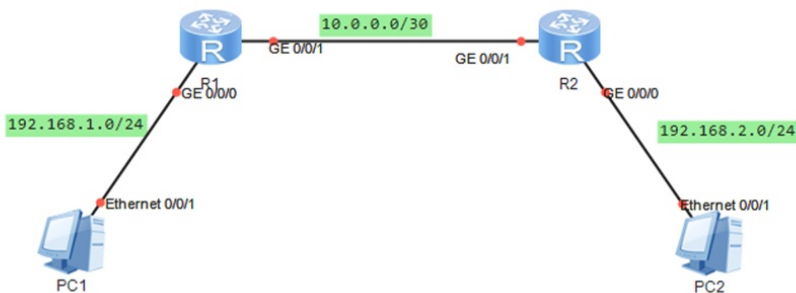


组网及说明



组网说明:

本案例采用ENSP模拟ISIS组网环境，通过ISIS路由协议实现PC之间的互访。

配置步骤

配置思路:

- 1、按照网络拓扑图配置ISIS
- 2、分别配置R1、R2的单区域ISIS，实现PC之间的互通。

配置关键点

配置过程:

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]isis 1
[R1-isis-1]network-entity 10.0000.0000.0001.00
[R1-isis-1]quit
[R1]int gi 0/0/0
[R1-GigabitEthernet0/0/1]isis enable
[R1-GigabitEthernet0/0/1]isis circuit-level level-1
[R1-GigabitEthernet0/0/1]quit
[R1]int gi 0/0/1
[R1-GigabitEthernet0/0/1]isis enable
[R1-GigabitEthernet0/0/1]isis circuit-level level-1-2
[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]isis 1
[R2-isis-1]network-entity 10.0000.0000.0002.00
[R2-isis-1]quit
[R2]int gi 0/0/0
[R2-GigabitEthernet0/0/0]isis enable
[R2-GigabitEthernet0/0/0]isis circuit-level level-1
[R2-GigabitEthernet0/0/0]quit
[R2]int gi 0/0/1
[R2-GigabitEthernet0/0/1]isis enable
[R2-GigabitEthernet0/0/1]isis circuit-level level-1-2
[R2-GigabitEthernet0/0/1]quit

```

查看R1与R2分别查看ISIS邻居已建立:

```

[R1-GigabitEthernet0/0/1]dis isis peer

Peer information for ISIS(1)

System Id      Interface      Circuit Id      State HoldTime Type      PRI
-----
0000.0000.0002 GE0/0/1        0000.0000.0001.01 Up    27s    L1 (L1L2) 64
0000.0000.0002 GE0/0/1        0000.0000.0001.01 Up    26s    L2 (L1L2) 64

Total Peer(s): 2
[R1-GigabitEthernet0/0/1]

```

```

[R2-isis-1]dis isis peer

Peer information for ISIS(1)

System Id      Interface      Circuit Id      State HoldTime Type      PRI
-----
0000.0000.0001 GE0/0/1        0000.0000.0001.01 Up    9s     L1 (L1L2) 64
0000.0000.0001 GE0/0/1        0000.0000.0001.01 Up    8s     L2 (L1L2) 64

Total Peer(s): 2

```

查看R1、R2的路由表, 均已学习到了路由:

```

[R1-GigabitEthernet0/0/1]dis ip ro
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 ISIS-L1 15 20 D 10.0.0.2 GigabitEthernet
0/0/1

```

```
[R2-isis-1]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  10.0.0.2           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     ISIS-L1 15   20        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-isis-1]
```

PC分别填写IP地址，且能相互PING通。

PC1

基础配置 | 命令行 | 组播 | UDP发包工具 | 串口

主机名:

MAC 地址:

IPv4 配置

静态 DHCP 自动获取 DNS 服务器地址

IP 地址: DNS1:

子网掩码: DNS2:

网关:

PC2

基础配置 | 命令行 | 组播 | UDP发包工具 | 串口

主机名:

MAC 地址:

IPv4 配置

静态 DHCP 自动获取 DNS 服务器地址

IP 地址: DNS1:

子网掩码: DNS2:

网关:

PC1

基础配置 | 命令行 | 组播 | UDP发包工具 | 串口

```
Welcome to use PC Simulator!

PC>ping 192.168.2.2

Ping 192.168.2.2: 32 data bytes, Press Ctrl_C to break
From 192.168.2.2: bytes=32 seq=1 ttl=126 time=110 ms
From 192.168.2.2: bytes=32 seq=2 ttl=126 time=94 ms
From 192.168.2.2: bytes=32 seq=3 ttl=126 time=62 ms
From 192.168.2.2: bytes=32 seq=4 ttl=126 time=78 ms
From 192.168.2.2: bytes=32 seq=5 ttl=126 time=47 ms

--- 192.168.2.2 ping statistics ---
 5 packet(s) transmitted
 5 packet(s) received
 0.00% packet loss
 round-trip min/avg/max = 47/78/110 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 192.168.1.2
Ping 192.168.1.2: 32 data bytes, Press Ctrl_C to break
From 192.168.1.2: bytes=32 seq=1 ttl=126 time=63 ms
From 192.168.1.2: bytes=32 seq=2 ttl=126 time=78 ms
From 192.168.1.2: bytes=32 seq=3 ttl=126 time=62 ms
From 192.168.1.2: bytes=32 seq=4 ttl=126 time=78 ms
From 192.168.1.2: bytes=32 seq=5 ttl=126 time=78 ms
--- 192.168.1.2 ping statistics ---
 5 packet(s) transmitted
 5 packet(s) received
 0.00% packet loss
 round-trip min/avg/max = 62/71/78 ms
PC>
```

至此，单区域ISIS典型组网配置案例已完成！