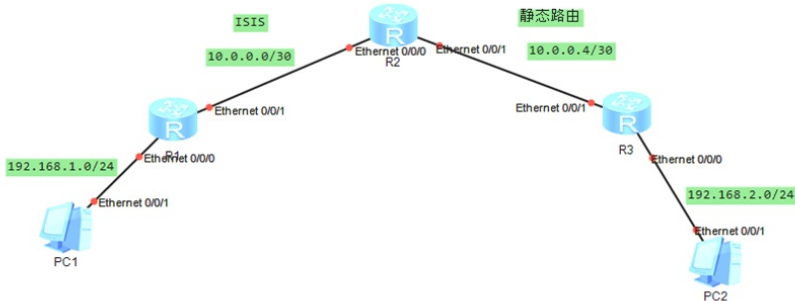


组网及说明



本案例采用ENSP模拟器来部署华为路由器的路由重分布的案例，在该网络中，R1与R2部署ISIS，R2与R3部署静态路由。为了实现PC之间的网络互通，需要在R2路由器部署ISIS与静态路由重分布。

配置步骤

- 按照网络拓扑图配置IP地址。
- 部署R1与R2的ISIS。
- 部署R2与R3的静态路由。
- 在R2配置ISIS与静态路由重分布。

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 eth 0/0/0
[R1-Ethernet0/0/0]ip address 192.168.1.1 24
[R1-Ethernet0/0/0]quit
[R1]int eth 0/0/1
[R1-Ethernet0/0/1]ip address 10.0.0.1 30
[R1-Ethernet0/0/1]quit
[R1]isis 1
[R1-isis-1]network-entity 10.0000.0000.0001.00
[R1-isis-1]is-level level-1-2
[R1-isis-1]quit
[R1]int eth 0/0/1
[R1-Ethernet0/0/1]isis enable 1
[R1-Ethernet0/0/1]quit
[R1]int eth 0/0/0
[R1-Ethernet0/0/0]isis enable 1
[R1-Ethernet0/0/0]quit
```

R2:

```
<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 R2
[R2]int eth 0/0/0
[R2-Ethernet0/0/0]ip address 10.0.0.2 30
```

```

[R2-Ethernet0/0/0]quit
[R2]int eth 0/0/1
[R2-Ethernet0/0/1]ip address 10.0.0.5 30
[R2-Ethernet0/0/1]quit
[R2]ip route-static 192.168.2.0 24 10.0.0.6
[R2]isis 1
[R2-isis-1]network-entity 10.0000.0000.0002.00
[R2-isis-1]import-route static
[R2-isis-1]quit
[R2]int eth 0/0/0
[R2-Ethernet0/0/0]isis enable 1
[R2-Ethernet0/0/0]quit
[R2]int eth 0/0/1
[R2-Ethernet0/0/1]isis enable 1
[R2-Ethernet0/0/1]quit

```

R3:

```

<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 R3
[R3]int eth 0/0/0
[R3-Ethernet0/0/0]ip address 192.168.2.1 24
[R3-Ethernet0/0/0]quit
[R3]int eth 0/0/1
[R3-Ethernet0/0/1]ip address 10.0.0.6 30
[R3-Ethernet0/0/1]quit
[R3]ip route-static 10.0.0.0 30 10.0.0.5
[R3]ip route-static 192.168.1.0 24 10.0.0.5

```

PC分别填写IP地址，且能相互PING通。



PC1 configuration window showing the following settings:

- Host Name: (empty)
- MAC Address: 54-89-98-DE-1A-1D
- IPv4 Configuration:
 - Static IP (selected):
 - IP Address: 192.168.1.2
 - Subnet Mask: 255.255.255.0
 - Gateway: 192.168.1.1
 - DHCP (unselected)
 - Automatic DNS Server Address (unchecked)
 - DNS1: 0.0.0.0
 - DNS2: 0.0.0.0



PC2 configuration window showing the following settings:

- Host Name: (empty)
- MAC Address: 54-89-98-57-3F-62
- IPv4 Configuration:
 - Static IP (selected):
 - IP Address: 192.168.2.2
 - Subnet Mask: 255.255.255.0
 - Gateway: 192.168.2.1
 - DHCP (unselected)
 - Automatic DNS Server Address (unchecked)
 - DNS1: 0.0.0.0
 - DNS2: 0.0.0.0

```
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=125 time=219 ms
From 192.168.2.2: bytes=32 seq=2 ttl=125 time=125 ms
From 192.168.2.2: bytes=32 seq=3 ttl=125 time=109 ms
From 192.168.2.2: bytes=32 seq=4 ttl=125 time=109 ms
From 192.168.2.2: bytes=32 seq=5 ttl=125 time=156 ms

--- 192.168.2.2 ping statistics ---
 5 packet(s) transmitted
 5 packet(s) received
 0.00% packet loss
 round-trip min/avg/max = 109/143/219 ms
```

```
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=125 time=109 ms
From 192.168.1.2: bytes=32 seq=2 ttl=125 time=125 ms
From 192.168.1.2: bytes=32 seq=3 ttl=125 time=125 ms
From 192.168.1.2: bytes=32 seq=4 ttl=125 time=94 ms
From 192.168.1.2: bytes=32 seq=5 ttl=125 time=140 ms

--- 192.168.1.2 ping statistics ---
 5 packet(s) transmitted
 5 packet(s) received
 0.00% packet loss
 round-trip min/avg/max = 94/118/140 ms

PC>
```

在R1与R2分别使用dis isis peer命令查看到R1、R2已完成ISIS邻居的建立。

```
[R1]dis isis peer

Peer information for ISIS(1)

System Id      Interface      Circuit Id      State HoldTime Type      PRI
-----
0000.0000.0002  Eth0/0/1      0000.0000.0001.01 Up    23s      L1(L1L2) 64
0000.0000.0002  Eth0/0/1      0000.0000.0001.01 Up    30s      L2(L1L2) 64

Total Peer(s): 2
[R1]
```

```
[R2]dis isis peer

Peer information for ISIS(1)

System Id      Interface      Circuit Id      State HoldTime Type      PRI
-----
0000.0000.0001  Eth0/0/0      0000.0000.0001.01 Up    7s       L1(L1L2) 64
0000.0000.0001  Eth0/0/0      0000.0000.0001.01 Up    8s       L2(L1L2) 64

Total Peer(s): 2
[R2]
```

分别在R1、R2、R3使用dis ip routing-table命令查看路由表，均已学习到了相应的路由。

```

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

Destination/Mask    Proto    Pre  Cost           Flags NextHop         Interface
-----
 10.0.0.0/30        Direct   0     0             D  10.0.0.1          Ethernet0/0/1
 10.0.0.1/32        Direct   0     0             D  127.0.0.1         Ethernet0/0/1
 10.0.0.4/30        ISIS-L1  15    20            D  10.0.0.2          Ethernet0/0/1
 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       Ethernet0/0/0
192.168.1.1/32      Direct   0     0             D  127.0.0.1         Ethernet0/0/0
192.168.2.0/24      ISIS-L2  15    74            D  10.0.0.2          Ethernet0/0/1

[R1]

```

```

[R2]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
-----
 10.0.0.0/30        Direct   0     0             D  10.0.0.2          Ethernet0/0/0
 10.0.0.2/32        Direct   0     0             D  127.0.0.1         Ethernet0/0/0
 10.0.0.4/30        Direct   0     0             D  10.0.0.5          Ethernet0/0/1
 10.0.0.5/32        Direct   0     0             D  127.0.0.1         Ethernet0/0/1
 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          Ethernet0/0/0
192.168.2.0/24      Static   60     0            RD  10.0.0.6          Ethernet0/0/1

[R2]

```

```

[R3]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
-----
 10.0.0.0/30        Static   60     0            RD  10.0.0.5          Ethernet0/0/1
 10.0.0.4/30        Direct   0     0             D  10.0.0.6          Ethernet0/0/1
 10.0.0.6/32        Direct   0     0             D  127.0.0.1         Ethernet0/0/1
 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      Static   60     0            RD  10.0.0.5          Ethernet0/0/1
192.168.2.0/24      Direct   0     0             D  192.168.2.1       Ethernet0/0/0
192.168.2.1/32      Direct   0     0             D  127.0.0.1         Ethernet0/0/0

[R3]

```

至此，华为路由器ISIS与静态路由典型组网配置案例已完成。